The Global Fund

Technical Evaluation Reference Group

Position Paper - Malaria Elimination in Southern Africa

May 2018

Executive Summary

Context

The Board allocated US$20 million for malaria elimination in southern Africa as catalytic investment, while there are also two multi-country grants from the previous allocation period. The Secretariat requested that the Technical Evaluation Reference Group (TERG) conduct an independent evaluation to provide an impartial review, technical advice, and recommendations.

Conclusions

A. The TERG conducted a thematic review on regional malaria elimination in southern Africa in coordination with the WHO and the Bill and Melinda Gates Foundation (BMGF). The review team held extensive consultations, conducted site visits to frontline mobile malaria posts, documentation review, and an online survey, and considered other regional malaria elimination initiatives. The TERG broadly endorses the findings and conclusions of the report.

B. The TERG agrees with the overall key priorities identified. An agreed regional strategy for malaria elimination in southern Africa with prioritized and costed activities would facilitate funding decisions. The TERG endorses the review's key recommendations, such as streamlined governance with efficient use of existing structures and platforms, while emphasizing the need to establish adequate links between the regional political leadership, technical advice and malaria program management. For malaria elimination to succeed in southern Africa additional funding is needed from domestic sources.

C. The Global Fund Secretariat is considering the review and the TERG position in order to structure an appropriate access to funding process. The TERG recommends the MOSASWA grant[1] to be continued, while the E8 grant[2] would require modification, based on a robust understanding of strategic priorities. The TERG is of the opinion that agreement should be reached in a relatively short time on the key activities for regional funding to better rationalize the E8 investment, and to facilitate other investments.

Input Received

The TERG formed a reference panel with the WHO and the BMGF, in addition to Roll Back Malaria, and the US President's Malaria Initiative. The review team held extensive

[1] QPA-M-LSDI, implemented by Lubombo Spatial Development Initiative 2, with a period of 1 January 2017 to 31 December 2019.

[2] QPA-M-E8S, implemented by Non-Profit Association "Southern Africa Malaria Elimination Eight Initiative Secretariat", with a period of 1 October 2015 to 30 September 2018.

consultations with the two Principal Recipients, ministries and national malaria programs, other key partners as well as Global Fund teams.

TERG Position Paper

1. For the 2017-2019 allocation period, the Board decided to allocate US$20 million for malaria elimination in southern Africa as a catalytic investment under a multi-country approach[3]. The Secretariat has delegated authority to operationalize catalytic investments[4], including the authority to decide how to structure this investment, the access to funding process and the continuation of existing multi-country grants. While there are two on-going multi-country grants on malaria elimination in this region from the 2014-2016 allocation period[5], implementation timelines of these grants render it too early for performance review. In this context, the Secretariat requested the TERG to conduct an independent evaluation of the broader current situation related to malaria elimination in southern Africa in order to provide an impartial review, technical advice, and recommendations (the "Review").
2. The TERG conducted a review on multi-country and regional programs in 2016, and recommended to the Secretariat to be more proactive and strategic rather than passively waiting for proposals from regional entities. The TERG notes that the current multi-country grant approach has incorporated key recommendations from the 2016 TERG review, for example, priorities for multi-country/regional grants pre-determined through a consultative process.[6] The TERG also noted in 2016 that under certain circumstances regional grants may be an acceptable mechanism for the Global Fund to support carefully selected elements of a regional action plan in countries that are no longer eligible for country grants.

What are the findings?

3. The TERG has conducted this thematic review with a deliberate effort to coordinate with some key stakeholders on this issue. Namely, the TERG formed an advisory panel, including representatives from the WHO and the Bill and Melinda Gates Foundation (BMGF), which invests significantly in malaria elimination in southern Africa, in addition to three TERG focal persons, including an ex-officio member representing Roll Back Malaria's Monitoring and Evaluation Reference Group (RBM MERG), who is also staff of the US President's Malaria Initiative (PMI). The TERG acknowledges the inputs and guidance, as well as keen interest in coordination throughout this review, provided by members of the panel.
4. The review team, selected through competitive tender, has held extensive stakeholder consultations with the two Principal Recipients of the current grants, ministries and national malaria programs, and various partners. The team conducted documentation review, site visits, numerous key informant interviews, an online survey, solicited inputs from Secretariat teams, and presented and discussed a draft report with the TERG at its

[3] GF/B36/DP06.
[4] GF/B36/DP06.
[5] GF/B33/EDP15 and GF/B36/EDP04.
[6] Strategic Review 2017.

meeting and with the Secretariat at a workshop in February 2018. A Technical Review Panel representative took part in these discussions. The review team also has considered lessons from the Regional Artemisinin-resistance Initiative (RAI) grant in the greater Mekong sub-region in South East Asia and Elimination of Malaria in Mesoamerica and Hispaniola Island (EMMIE) grant in the Central America region, while recognizing the different epidemiology of malaria and political and economic situations.

5. The Review found that there is inherent tension between the priorities for national malaria programs to control disease burden (especially in high burden countries such as Angola and Mozambique) and malaria elimination in the region, initially in the four lower burden countries: Botswana, Namibia, South Africa, and Swaziland. Some malaria programs are not able to allocate additional country funding to elimination-focused activities while addressing high burden areas. Countries like Botswana are transitioning from Global Fund support while others are receiving less malaria money due to lower burden and higher income categories. External funding is a means of maintaining a focus on malaria elimination when the burden is so low it is not a public health priority within the country. At the same time, the US$20 million catalytic investment for three years is not sufficient to fill the gaps in country level funding required to eliminate malaria in the region, and therefore needs to be used very carefully and strategically. This situation is aggravated by the fact that priority activities and their costs for regional malaria elimination are not clearly defined and agreed by key stakeholders.
6. In addition, there are complex governance structures for the E8 activities, in part in response to Global Fund requirements, as well as a lack of clear mandates for some of the local actors and sub-optimal oversight arrangements. Sharing of information across countries has been a significant issue. These constraints have an impact on the effectiveness and inefficiency of implementation of the current Global Fund grants. The TERG is in agreement that the MOSASWA grant shows early promise as a functional public-private partnership with significant funding provided by the business sector, and that the Global Fund should encourage public-private partnerships such as this.
7. The TERG endorses the findings and conclusions of the report.

What are the TERG's recommendations?

8. The TERG agrees with the overall key priorities proposed by the Review report, summarized as follows:
    - The TERG supports further fostering of improved data collection and a regional data sharing and analysis platform to enable timely management for regional elimination, which could include emergency responses to epidemics. The most important indicator for certification of elimination is 'no indigenous cases', which means knowing whether a case of malaria has been acquired abroad or locally. That means investments in data systems and data sharing across countries. The TERG acknowledges the recent improvement in data sharing, but encourages data sharing and use to be clearly established as routine activities.
    - Analysis of available data should be used to develop and cost a possible set of "tailored packages" of intervention for specific areas as recommended by the Review. These should be activities of a regional nature, focused on elimination, and not appropriate for funding through country grants. The prioritization and costing of activities can be used to inform the use of the current and future investments from the Global Fund but

also investments by other key donors and counterpart-financing, including government and private sectors.

- For elimination of malaria to succeed in southern Africa additional funding will be needed. A key role of the E8 regional governance structure, anchored in SADC[7], should therefore be to advocate for additional domestic sources and to actively promote and support the use of innovative funding mechanisms.
- The TERG supports the Review's priority of strengthening the E8 regional strategic steering capacity to lead the vision of malaria elimination while also reinforcing sub-regional technical coordination to guide and oversee the interventions in specific areas with different needs.

9. Regarding the Review's key recommendations, the TERG's view is summarized in the follow points:
    - The TERG agrees with the suggested areas for consideration for funding under a regional grant. Funding needs for regional coordination and key targeted activities critical for malaria elimination but unlikely to be supported through country-level funding should be identified based on a robust understanding of strategic priorities. Given time-constraints of the current access to funding schedule the TERG recommends going ahead with already agreed regional priorities and funding for coordination, while developing the Review's recommended "tailored packages" of interventions. As recommended by the Review, the TERG emphasizes the importance of identifying the best implementing entities of sub-packages of priority elimination activities, which may include earmarked allocation to relevant national malaria grants, while regional entities should focus on regional activities that may not be done nationally. This is in line with the Review's recommendations for a two-stage approach to grant funding, but the TERG recommends using a Regional Strategy Acceleration Plan with costing and an investment case that are currently being developed, rather than using the first year to develop agreed priorities. The TERG understands that on-going grants have earmarked budgets for evaluation, which could be used to facilitate the development of the priorities for regional funding.
    - The TERG recommends that the MOSASWA grant be continued, in order to foster a public private partnership that shows promise.
    - In relation to the E8 grant, the TERG supports the need for more streamlined governance rather than more governance, and more efficient use of existing structures and platforms, while emphasizing the need to establish functional regional links between the political leadership at the ministerial level, technical guidance and the leadership at the malaria program level. As recommended by the Review this may require a multi-stakeholder group with sufficient technical expertise and representation to provide impartial advice to the SADC ministers' sub-committee that oversees the regional malaria elimination effort.
    - The TERG notes the Review's recommendation to expand the mandate of the E8 Board to provide oversight of malaria elimination in the sub-region, not just for the E8 grant. The intention of this recommendation is to ensure that the grant is guided by a group that also has oversight of the broader elimination effort including both national and regional activities. The TERG agrees with the underlying principle but cautions that the simultaneous expansion of Board membership (as recommended, and with which

[7] Southern African Development Community

the TERG agrees, to provide greater technical strength) and expansion of the Board mandate (which may increase political complexity) may result, initially, in reduced oversight attention to the Global Fund E8 grant.

- The TERG also recommends that the Secretariat enable more independently conducted monitoring and evaluation for each grant. It shares a concern expressed by other stakeholders interviewed for the Review that Principal Recipient oversight of the evaluation budget included in the grants may not achieve the level of independence required in this particularly complex context.

What are the lessons for the future?

10. The TERG takes note of the recommended point on simplifying and streamlining the Global Fund managerial arrangements for regional grants including possible consideration to aggregating small national malaria grants as earmarked components of regional grants, similar to the RAI, in order to synergistically manage the focus on regional malaria elimination. Given that the countries closer to elimination have very small allocations (in the current context, Namibia and Swaziland), and others may be, or become, ineligible for funding (South Africa and Botswana), it would be efficient to manage the regional and small country grants through a single Country Team.
11. The TERG requests considering continuous investment in regional malaria elimination initiatives in future allocation periods because malaria elimination is not necessarily aligned with national priorities in countries with high malaria burden. Regions such as southern Africa need the catalyst of regional funding to stay focused on elimination. Low burden countries such as Botswana, and particularly those that have little or no grant money for malaria, could easily lose this focus. The grant and regional coordination mechanism will allow implementation to continue moving forward. It is also important for the Board and its members to facilitate regional cooperation as constituency interests typically overlap with those of regional stakeholders, including governments, private sector companies and foundations.

Annexes

The following items can be found in Annex:

- Annex 1: Relevant Past Board Decisions
- Annex 2: Links to Relevant Past Documents & Reference Materials

Annex 1 – Relevant Past Board Decisions

Relevant past Decision Point	Summary and Impact
GF/B36/DP06: Catalytic Investments for the 2017 – 2019 Allocation Period (November 2016)[8]	The Board set out, as part of USD 800 million for catalytic investments over the 2017 – 2019 allocation period, US$20 million as a priority to sustain the scale of GF investments to address malaria elimination in southern Africa. Resources are to be used for: regional policy harmonization, quality assurance systems, proactive provision of technical support, identification and resolution of bottlenecks, regional training, cross-border regional collaboration, monitoring of progress and information sharing through online reporting with high temporal and spatial resolution, targeted interventions to reduce cross-border transmission, identifying determinants of continued transmission, external verification of target achievement, certification of malaria–free status and technical support to prevent reestablishment in countries free of malaria, facilitation of elimination in countries ineligible for country allocations, and identifying ways to ensure long-term sustainable financing.
GF/B36/EDP04 Decision on the Secretariat's Recommendation on Additional Funding from the 2014 Allocation (December 2016)[9]	The Board approved the incremental funding recommended for RO Lubombo Spatial Development Initiative 2 (LSDI-2) (QPA-M-LSDI)
GF/B33/EDP15 Decision on the Secretariat's Recommendation on Additional Funding from the 2014 Allocation (September 2015)[10]	The Board approved the incremental funding recommended for Elimination 8 - SADC (QPA-M-E8S)

Annex 2 – Relevant Past Documents & Reference Materials

- The Global Fund. 36th Board Meeting Catalytic Investments for the 2017-2019 Allocation Period. GF/B36/04 – Revision 2. 16-17 November 2016, Montreux, Switzerland.
- TERG's Strategic Review 2017.

[8] https://www.theglobalfund.org/board-decisions/b36-dp06/
[9] https://www.theglobalfund.org/board-decisions/b36-edp04/
[10] https://www.theglobalfund.org/board-decisions/b33-edp15/

Secretariat management response to TERG evaluation

Malaria Elimination in Southern Africa

Introduction

The Technical Evaluation Reference Group (TERG) is a critical component of the Global Partnership, providing independent review and evaluation of the Global Fund's business model, investments and impact to the Global Fund Board through its Strategy Committee. The Global Fund operates with a high degree of transparency and now publishes most non-advisory TERG reports on our website after they are reviewed by the Board and following the end of the internal deliberative process.

The Global Fund Secretariat appreciates the review of its regional grants to support malaria elimination in Southern Africa by the TERG that was requested by the Secretariat. We agree with most of the findings and recommendations of the TERG Review and the TERG Position Paper but regret that the evaluation fell short of achieving its objective to recommend a best way forward in terms of strategic options for the Global Fund's Catalytic Investment, based on prioritization, technical and political feasibility, strengths and weaknesses of regional grants and available funding.

Areas of agreement

We agree with the TERG's findings that funding needs for regional coordination and targeted activities that are critical for malaria elimination, but unlikely to be supported through country-level funding, should be identified based on a robust understanding of strategic priorities. We therefore agree that the E8 Board should submit a delineated expression of demand for malaria elimination based on a solid data analysis to determine the geographic areas to prioritize based on regional, rather than national priorities, and develop tailored sub-regional intervention packages to address these priorities. We particularly agree with the TERG's recommendation to use the costed Regional Strategy Acceleration Plan, rather than using the first year to develop priorities, as mentioned in the Review. We strongly agree with the TERG's view that a key role of the E8 regional governance structure should be to advocate for additional domestic sources and to actively promote and support the use of innovative funding mechanisms to increase funding available to the regional goal of malaria elimination.

We also agree with the TERG's recommendation that the MOSASWA grant be continued.

Finally, we appreciate the TERG's request for considering continuous investment in regional malaria elimination initiatives in future allocation periods. We strongly believe that a regional approach and cross-border collaborations will be essential to achieve malaria elimination. A decision on whether this should be supported through regional funding (rather than through providing additional funds to national allocations) should be made based on a solid analysis of the impact of regional initiatives.

Areas of disagreement

As mentioned above, we regret that the TERG evaluation did not make recommendations on specific intervention packages to be implemented that would be complementary to the on-going or

planned interventions in country grants, considering how the limited country allocations are being prioritized in the relevant countries, as defined in the evaluation terms of reference.

Next steps paragraph

In light of this review, the Global Fund has invited the E8 regional initiative to apply for available funding within the approved multi-country malaria priority. In line with TERG recommendations, the E8 regional initiative has been invited to articulate the funding proposal around the following defined strategic components:

- **Enabling regional environment for malaria elimination: the proposal should clearly demonstrate the value-added of regional financing, including but not limited to:**
    - Advocacy and resource mobilization: ensure malaria elimination remains high on national and regional political agendas; leverage additional domestic resources, including from the private sector and innovative financing mechanisms;
    - Set up and maintain an Independent Monitoring Panel to enable all stakeholders to improve program quality and maximize impact based on real time feedback;
    - Set up and maintain a regional and/or local data platform/sharing mechanism to guide locally tailored intervention packages;
    - Maintain the Regional Monitoring Early Warning Preparedness and Response Team (Malaria 'Situation Room') to address financial, implementation and supply chain bottlenecks as they arise and respond to emerging needs with ability to address evidence/surveillance information gaps;
    - Expand and coordinate technical assistance for malaria elimination across the region and foster intra-regional learning, including training of local response teams;
    - Demonstrate additionality, technical alignment and coordination with the MOSASWA regional initiative;
    - Provide a sustainability plan for the continuing service delivery investment beyond grant period.
- **National level investments for malaria elimination: optimizing existing investments and addressing funding gaps, including but not limited to:**
    - Facilitate the alignment and synchronization of national level service delivery (e.g. vector control campaigns);
    - Support delivery of non-prioritised services at the national level (e.g. in second-line countries' "lower burden" areas).

Similarly, the MOSASWA Regional Initiative has been invited to apply for available funding within the approved multi-country malaria priority and to demonstrate complementarity to the work (current and planned) being funded under the E8 regional initiative.

Concluding statement

We thank the TERG for our continued partnership to strengthen the impact of the Global Fund partnership.

Thematic Review
On Elimination of Malaria
In Southern Africa

Reporting to the
Technical Evaluation Reference Group (TERG)
Global Fund to Fight AIDS, TB & Malaria

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April 5, 2018

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Acronyms

ACT	Artemisinin-based Combination Therapy
ADPP	*Ajuda de Desenvolvimento de Povo para Popo*
AFRO	WHO Regional Office for Africa
AIM	Action and Investment to Defeat Malaria 2016–2030
ALMA	The African Leaders Malaria Alliance
BCC	Behaviour Change Communication
BMGF	Bill and Melinda Gates Foundation
CCMs	Country Coordinating Mechanism
CDC	Centers for Disease Control
CDR	Call Detail Records
CHAI	Clinton Health Access Initiative
CISM	*Centro de Investigação em Saúde de Manhiça*
COI	Conflict of Interest
DFID-UK	The Department for International Development – United Kingdom
DHMTs	District Health Management Teams
DHO	District Health Office
DIB	Development Impact Bonds
DRC	Democratic Republic of the Congo
E8	Elimination 8
EPR	Emergency and Preparedness Response
UCSF	University of California San Francisco
Global Fund	The Global Fund to Fight AIDS, Tuberculosis and Malaria
GMP	Global Malaria Programme
GPS	Global Positioning System
GTS-WHO	Global Technical Strategy for Malaria 2016–2030
HMIS	Health Management Information System
HR	Human Resources
IDB	Inter-American Development Bank
IEC	Information, Education and Communication
IOM	International Organization for Migration
IRS	Indoor Residual Spraying
IST	Inter-Country Support Team
ITNs	Insecticide-treated Bed Nets
LLINs	Long-lasting Insecticidal Nets
LSDI	Lubombo Spatial Development Initiative
M&E	Monitoring & Evaluation
MACEPA	Malaria Control and Elimination Partnership in Africa
MEI	Malaria Elimination Initiative
MHS	Military Health Services
MOSASWA	Mozambique, South Africa and Swaziland
MMPs	Mobile and Migrant Populations
NCID	National Institute for Communicable Diseases
NGO	Non-Governmental Organisation
NMCP	National Malaria Control Programme
NMESP	National Malaria Elimination Strategic Plan
NMSP	National Malaria Strategic Plan
NPO	National Program Officer
PMI	President's Malaria Initiative

PRs	Principal Recipients
PSM	Procurement and Supply Management
PUDR	Progress Update and Disbursement Request
RAI2E	Regional Artemisinin Initiative
RBM	Roll Back Malaria
RC	Regional Council
RCM	Regional Coordinating Mechanism
RDTs	Rapid Diagnostic and Testing Kits
RFP	Request for Proposal
RMEI	Regional Malaria Elimination Initiative
SA-MRC	South African Medical Research Council (SA-MRC)
SADC	Southern African Development Community
SARN	South Africa Regional Network
SAMP	Southern African Migration Programme
SIB	Social Impact Bonds
STC	Sustainability Transition and Co-financing
TA	Technical Assistance
TOR	Terms of Reference
UNAM	University of Namibia
UNICEF	The United Nations Children's Fund
WHO	World Health Organization
ZAM-ZIM	Zambia-Zimbabwe Cross Border Malaria Initiative

Acknowledgements

The Review Team would like to express its gratitude to the very many stakeholders from a broad range of constituencies who generously gave their time to provide information and views on the E8. In particular, we would like to thank the national malaria control programmes and their implementing partners for the time invested in the organization and conducting of field visits, as well as government and other staff met at all levels. Without the field visits and the willing provision of information it would have been impossible to gain an impression of the activities on the ground. Special thanks go to the E8 Ambassador for generously sharing his knowledge and institutional memory, and the E8 Secretariat for their efficient and thoughtful support. The Team is indebted to the staff of the Global Fund secretariat for precious feed-back along the mission. Lastly, we are thankful for the TERG secretariat team for their great facilitation to help organize this mission and the reference group for their preliminary comments on the draft report.

We have a special thought for the Zimbabwe IRS Team - the front-liners of malaria elimination - who were tragically killed in a bus accident while on duty during the mission.

A. EXECUTIVE SUMMARY

I. Observations & Analysis

1.1 Introduction

Under the Southern African Development Community (SADC) Heads of States, the Elimination 8 (E8) initiative is a sub-regional initiative supported by eight Ministers of Health to address the barriers to malaria elimination by facilitating multilateral collaboration. The countries involved are delineated by four "front-line" countries (Botswana, Namibia, South Africa, and Swaziland) aiming at eliminating malaria by 2020, and four "second-line" countries (Angola, Mozambique, Zambia and Zimbabwe) by 2030. The Global Fund supports two different grants in the region: the E8 grant and the Mozambique-South Africa-Swaziland (MOSASWA) grant.

This review aims to provide the Global Fund with an analysis of the current situation in the region, and recommendations on how to best invest its US$ 20 million set aside from the catalytic investment envelope for the period 2019-2021 to support the E8 achieving its goal.

With the vision of having a malaria-free Southern Africa by 2020 in front-line, and 2030 in second-line countries, the E8 Strategic Plan 2015-2020 outlines a set of objectives, strategies, and activities to be implemented systematically in order to ensure harmonization and synchronization of operations and activities. The Strategic Plan is used to target available, and mobilize additional, resources. Empowerment and ownership of the implementation of interventions at the district and community level is central to the success of this strategy: remote communities, migrants, and mobile populations are most vulnerable, and also central, to the elimination strategy.

1.2 Malaria Situation in the E8 Countries

After a decade of reducing malaria burden, the E8 countries began to report a series of malaria outbreaks, whose reach extended across country borders. Botswana and Namibia experienced the sharpest increase in transmission relative to their 2016 levels. Zimbabwe, Mozambique, South Africa, and Swaziland also experienced outbreaks in parts of their malaria-prone areas. The 2017/2018 season has also started early with sharp increases in malaria cases reported, contrary to low case reports in August, September and October in past seasons.

An analysis of the recent outbreaks concluded that, while heavy rainfall had been experienced across the region, an important contributing factor was that countries were vulnerable due to sub-optimal coverage of key interventions (for instance low IRS coverage and stock-outs of essential medicines and supplies) and weak program management capacity. In addition, there were inefficiencies in surveillance and response systems to rapidly respond and react to the increasing transmission. Weather predictions for 2017/18 are pointing to the likelihood of similar transmission patterns in the first quarter of 2018.

As a response to these outbreaks, a "Regional Elimination Acceleration Plan" is currently being developed to guide future investments in national and regional strategies (to be finalized by March 2018). It consists of three pillars: integrated vector management, parasite and patient management, and epidemic management.

1.3 Current Response to Malaria Elimination in the E8 Countries

Among the various regional and cross-border initiatives established in the region since 2006, the two main ones supported by the Global Fund and other partners are the E8 Initiative and MOSASWA Initiative.

E8 Initiative - Global Fund E8 Grant

The Global Fund serves as the main funding partner to the E8 Initiative through a US$ 17.8 million 3-year grant that ends in September 2018. Additional funding from the BMGF (US$4.2 million) focuses on piloting interventions to target sources of malaria infection across borders. The University of California San Francisco (UCSF) and the Isdell Foundation also fund the initiative.

In line with the E8 strategic plan goal, the objectives of the grant are to strengthen regional coordination in order to achieve elimination in each of the E8 member countries; expand access to early diagnosis and treatment for border communities as well as mobile and migrant population; and strengthen regional epidemiological and entomological surveillance systems by the end of 2017. The grant focuses mainly on the establishment of 70 border health facilities on five key international borders between high and low transmission districts to improve access to malaria testing and treatment services, targeting Mobile and Migrant Populations (MMPs) and underserved residents of border districts.

The average performance of the grant (Apr 2017) was 19% for the two indicators reported, with a low absorption rate of 34% due to slow tender processes and government protocols. However, a recent update from the E8 Secretariat Board (Nov 2017) indicates that the implementation is getting momentum. Indeed, 46 malaria posts and surveillance units have been established, and 120,000 people were tested since April 2017, with a positivity ranging from <1% (Botswana) to 22,1% (Angola). However, stock-outs of RDTs and ACTs during outbreaks meant that significantly fewer people than envisaged were tested and treated.

MOSASWA Initiative - Global Fund MOSASWA Grant

The MOSASWA (Mozambique, South Africa & Swaziland) is a sub-regional initiative aligned with the E8 initiative and funded through a public-private grant. The grant of US$ 9.7 million includes a US$ 4 million co-funding by a private sector group named ”Good Bye Malaria”. This grant was launched in Maputo in May 2017.

The grant brings together the public and private sector to accelerate the transition from control to pre-elimination of malaria in southern Mozambique, and from pre-elimination to elimination in Swaziland and South Africa. Its goal is to achieve zero local transmission in Swaziland, South Africa and Maputo province by 2018, and achieve pre-elimination status in southern Mozambique by 2020.

The objectives of the grant are to establish and operationalize the MOSASWA malaria cross-border initiatives; expand and sustain access to malaria elimination interventions; strengthen capacity for malaria surveillance, operational research and M&E; and mobilize resources. The grant’s interventions focus on indoor residual spraying (IRS) activities, as well as case management, surveillance and Information, Education and Communication (IEC). A small portion of the grant is used for providing malaria health posts in the areas not covered by E8 Grant.

No progress report has been submitted thus far. Based on information received from “Good Bye Malaria”, the grant is expected to exceed its targets. The indicator on the proportion of households in targeted areas that received IRS during the reporting period is set at 93%; by January 2018, 95% spray coverage has been reached in the four target districts in Mozambique.

1.4 Governance

While the E8 and MOSASWA fall under the SADC-E8 overall vision, they are distinct initiatives launched in parallel, at different times, and each works under separate governance structures.

E8 Initiative Governance Structure

The E8 governance structure consists of different sections fulfilling various roles. The E8 Ministerial Committee is made up of the eight Ministers of Health who are the decision-making body of the E8 that leads strategic and diplomatic dialogue on the regional partnership towards an E8 free of malaria on behalf of Member States. The E8 Secretariat Board is responsible for playing a stronger leadership role, ensuring meaningful participation with the E8 Technical Committee in the Strategic Plan 2015-2020 at regional level. National Malaria Control Program (NMCP) managers are non-voting members, and one NMCP manager represents the other country as ex-officio at the Board. The E8 Secretariat translates E8 resolutions and plans into action, facilitating regional collaboration across the eight countries. The E8 secretariat is also the PR of the E8 Global Fund grant. The E8 Secretariat performs secretariat functions for the Board, the oversight committee and the Situation Room, and also acts as a fund manager of grants. The E8 Technical Committee is mandated to oversee, advise and recommend technical interventions to be implemented across the region, and reports to the Ministers Sub-Committee. In September 2017 the E8 created a Regional Monitoring Early Warning Preparedness and Response Team, the so-called "Situation Room"**.** Its role is to ensure proper forecasting and quantification of malaria commodities required for emergencies, detect and deploy mitigating interventions before and during epidemics, and quickly detect and effectively respond to outbreaks.

MOSASWA Initiative Governance Structure

MOSASWA is governed by the Health Ministers Forum, a Regional Council, a Regional Coordinating Mechanism, and Technical Committees. The MOSASWA Health Ministers Forum provides oversight function for the implementation of the initiative, and guidance and regular feedback to the E8 Health Ministers forum. The Regional Council is the main executive and coordinating body for this regional collaboration. The Permanent Secretary or designate, together with NMCP managers, form part of the Regional Council with developmental partners. The Council sets the policy and strategic direction of the MOSASWA regional collaboration and is accountable to the MOSASWA Health Ministers Committee for the performance and effectiveness of the goals of the partnership. There is no funding set aside to strengthen the Regional Council, which plays a pivotal role in supporting the MOSASWA initiative. In addition to the above, a Regional Coordinating Mechanism (RCM) was created in August 2017 to provide oversight for the Global Fund grant.

In summary, both governance structures seem to be functioning based on well-drafted manuals. The newly established E8 Situation Room is a big step forward to improve data sharing for better emergency response. The MOSASWA benefits from Regional Council technical guidance with strong NMCP leadership. While the E8 Secretariat Board interacts

with the MOSASWA, it only oversees its own E8 grant(s) and there is no direct line of reporting from MOSASWA to the E8 Secretariat Board. The current setting does not reflect the overarching E8 leadership initiative model that would ideally be overseeing all elimination initiatives in the region, including MOSASWA (and possibly others). In addition, there is a lack of clarity around the way each of the technical forums – the E8 Technical Committee and the MOSASWA Regional Council - link to the current E8 Secretariat Board. Another confusion is the fact that the Regional Council, being a technical body for MOSASWA, is also in charge of 'policy decisions'.

The review team noted that, while operating under two different governance structures, both initiatives have started to interact better since 2017.

1.5 Partner's Landscape

There is a particularly strong and proactive multi-stakeholder engagement from a range of donors, networks, technical and academic partners. While well-structured at country level, there is currently limited comprehensive regional coordination. Some recurrent challenges directly related to the elimination agenda include questions around tackling parasite resistance to insecticides; the lack of adequate technical and human resource capacities - especially in second-line countries; prevalence of asymptomatic cases and magnitude of the reservoir; and diversity of vector and related behaviour.

While new interventions, pilot studies and innovative approaches are being conducted by partners, it is not clear if there is a mechanism to assess and evaluate their impact for the specific purpose of malaria elimination. Here, the E8 could play a stronger role in overseeing such interventions and make evidence-based assessment of their respective effectiveness. The E8 would greatly benefit from having a coordinated technical assistance platform that identifies main gaps and plans according to the support available. Equally important would be to coordinate the research agenda on malaria elimination under the leadership of the E8.

In addition, the role of partners, NGOs and civil society organisations seems to be limited to service delivery and not so much to advocacy, and these partners are insufficiently represented at the E8 platform. The positive example of private sector engagement (Good Bye Malaria) as part of the MOSASWA initiative has not (yet) transpired into more involvement of corporations in other parts of the E8.

Finally, there is a general consensus that WHO support has been sub-optimal in the region for malaria elimination. While CHAI has to some extent filled the gap by providing technical support to NMCPs for their elimination interventions, they do not have the mandate, or the convening power to take the place of the WHO.

1.6 Financial Landscape

Some malaria-endemic SADC countries have recently taken greater responsibility to invest in reducing malaria transmission. For the E8 countries, domestic funding increased from US$ 71 million to US$ 98 million between 2014 and 2016.

In addition to the current regional Global Fund investment through the E8 and MOSASWA grants (US$ 27.6 million), the country allocation of all seven eligible countries (excl. South Africa) accounts for US$ 323.7 million, of which the three front line-countries take up 3.7%.

Donor funding will reduce as E8 countries move from low- to middle-income status, which implies an increasing need for more reliance on domestic financing for malaria activities. The countries that are closest to eliminating malaria saw significant reductions in funding from the Global Fund, varying from a 67% decrease in Namibia and 50% in Swaziland. Furthermore, Botswana will not receive any further money from the Global Fund after 2020, and Namibia

and Swaziland have been notified that they are in the cohort of the next transitioning countries as per the Global Fund criteria.

In a context of interconnectivity of communities in the E8 region, it is important to re-emphasize the fact that lack of funding in one country can lead to a resurgence of cases in another. In addition, second-line countries could be tempted to focus available resources on higher burden areas, deprioritizing border areas which are key from the regional malaria elimination perspective.

Globally, countries are increasingly considering new financing options that leverage debt with financial assistance in order to move from a donor-dependent grant to one that is financed from domestic funds. Social Impact Bonds (SIB) and/or Development Impact Bonds (DIB) and/or soft loans through blended funding are possible options to bridge the gap between dependence on donors and reliance on domestic resources. In Mozambique, the issuance of a DIB for malaria elimination is being trialled through the RBM Partnership and Dalberg. These types of bonds present an opportunity to leverage financing from non-traditional investors.

Another interesting funding arrangement was made in seven Central American countries and the Dominican Republic through the Regional Malaria Elimination Initiative (RMEI). The mechanism will bring US$ 83.6 million in new funds, and is expected to leverage over US$ 100 million in domestic financing and US$ 39 million of existing donor resources across the region by 2022 to ensure malaria remains a top health and development priority despite dwindling numbers of cases.

1.7 Global Fund Malaria Portfolio – Options for Change

Currently, the Global Fund portfolio consists of seven country grants and two regional grants (E8 and MOSASWA). The country grants are managed by seven different country teams, which in turn are part of three regional departments. The E8 and MOSASWA grants are also managed by two different country teams, each being part of two different departments. While country teams in charge of the different grants coordinate and regularly exchange, the current setting could be streamlined to reflect the region's change of paradigm of shifting from a country grant perspective to a regional approach.

On management structure, the leadership could be grouped under one department and one country team that would also be in charge of managing the national grants of the four front-line countries. This would send a clear and coherent message that the Global Fund support for issues is really entering a new era.

On funding structure, country allocation of the three front-line countries (whose interventions should be focused on elimination) could be merged with the catalytic envelope and become a single regional fund for elimination. Allocation per country would then be done looking at elimination priorities and include allocating resources to both front-line and second-line countries based on a well-informed, costed and revised elimination plan.

1.8 Discussion

From this review some key issues emerged, which can be summarized as: 1) data for decision-making, 2) governance of the regional response, and 3) regional collaboration and coordination of the emergency response. These are discussed in turn below.

Data for Decision-Making

One issue that was raised for both the E8 and MOSASWA grants relates to lack of (quality) data and data use to properly inform decision makers on the most appropriate packages of interventions to be supported for malaria elimination, as well as locations to implement these

interventions and deliver services. Currently, sources of infections are identified through case facility information and general reports on routes of migration. Available data on human mobility – i.e. patient travel history data, census migration data, displacement surveys, GPS tracking data, mobile phone records – could be put to better use to better understand malaria parasite flows. By doing so, some consistent patterns will emerge around the concept of "connected communities". In addition, the recent data generated in the region shows that as transmission declines, regional epidemiology becomes increasingly heterogeneous. As a consequence, a shift towards differentiated elimination programming based on real-time data is urgently needed.
Better data for decision-making would enable the E8 to develop a solid investment case strategy for the region and tailor effective sub-regional packages of interventions accordingly.

Governance of the regional response

Under the governance of the regional response, several issues were raised. Firstly, the complementarity and additionality of the regional versus the country approach should be clarified. As countries are mostly interested in malaria activities taking place within their borders, the E8 and its partners should emphasise the unique aspects of a regional approach and provide clear guidance on how regional funding differs from the more traditional, country-specific allocations. The regional approach includes prioritization and targeting interventions based on regional sources of infections, using regional coordination mechanisms, allocation of resources towards high-incidence/high-mobility areas spurring on regional transmission, synchronizing interventions across countries, and supporting the alignment of regional and national strategies.
Secondly, there is a need for better rather than more governance. A vast number of agreements, guides and manuals exist, but these seem more relevant to address political rather than technical issues. The E8 Ministers sub-committee would benefit from the support of a strong, empowered E8 Board as the main strategic unit to steer the malaria elimination agenda, thereby elevating its mandate.
Thirdly, there is a need to delineate the role of the E8 Board as the regional strategic unit for the whole E8 region, with the sub-regional technical forums supervising sub-regional packages of interventions. Following the current model of MOSASWA with its Regional Council, such forums should be closely tied to the units implementing the selected set of interventions decided by the E8 Board. In addition, the local health authorities have not been fully involved in programme activities and should start playing an important role in implementation and coordination.
Lastly, E8 Secretariat role should serve the Board and its committees, and not also fulfil the role as fund manager. This current 'double function' is not ideal as both are distinct roles requiring different lines of accountability; this set-up should be revised if the E8 initiative moves forward establishing a financing platform to manage and distribute the funding.

Regional Collaboration and Coordination of the Emergency Response

The Global Technical Strategy 2016-30 recommends as one of its three pillars the transformation of surveillance into a core intervention to achieve elimination. As part of the accelerated E8 strategy, robust systems for case reporting, investigation and response have been prioritized to accelerate progress towards elimination. The recent Swaziland outbreaks seem to have been the wake-up call and a turning point for data sharing within the region. With the subsequent creation of the Situation Room, reporting and sharing data has improved significantly. However, more can and should be done.
For instance through the creation of an on-line, regional data-sharing platform with the aim to better understand disease trends and strengthen surveillance, and start shifting the focus

from a 'control-mode' into an 'elimination-mode'. This will also require increased capacity of national programs to generate, analyze, share and use information to target interventions and support better cross-border collaboration. Given the sensitive nature of sharing nationally owned data, the E8 should use the adequate institution with the right mandate to support this process; the WHO could play a pivotal role here. Adequate and timely use of this information is equally important, alerting decision makers and challenging the status quo by providing answers and confronting difficult issues in an independent fashion. The current technical committees are bound to their respective lines of command; the E8 Board would benefit from having an independent monitoring group to play this role. Surveillance of malaria elimination could also be an entry point to the broader health security perspective. This integration will be critical for prevention of re-establishment once countries reach elimination.

II. Priority Areas to Support the E8

Based on the previous discussion, five overarching priority areas have been identified to be targeted by the Global Fund and other partners in order to support the SADC-E8 initiative in achieving its goals. Each is discussed in turn below.

Priority area 1: Develop a solid inter-country data analysis to identify sources of infection and strengthen regional surveillance capacity

As countries move towards malaria elimination, imported infections become increasingly significant; they often represent the majority of cases; can sustain transmission and cause resurgences. To develop a comprehensive targeted intervention strategy, there is a need for better understanding of the characteristics of populations exporting and importing infections and their patterns of migration. Without solid data on cross-border transmission there is also the tendency to allocate regional resources towards national priorities to cover gaps in national strategic plans; this doesn't serve the principle of thinking "regionally".

Areas of focus

- Conduct regional analyses of importation and travel history data to identify "sources" of intense ongoing local transmission (high-exporters of malaria) and locations frequently receiving imported malaria from their neighbors that subsequently fuel onward transmission;
- Use regional analyses to define cross-border "connected and underserved malaria communities" that require synchronized planning, intervention and coordination of elimination activities between countries;
- Conduct a detailed review of country-specific National Strategic Plans and funding allocations to identify the elimination-specific gaps within each sub-regional "connected and underserved malaria community" (e.g. de-prioritization of core interventions in southern Mozambique).

Priority area 2: Develop a set of tailored sub-regional packages of interventions based on the principle of "connected and underserved communities"

The E8 and MOSASWA interventions rely to a large extent on incomplete information and assumptions, and struggle to define evidence-based interventions in targeted locations. Although existing national malaria strategies recognize parasites do not respect national borders; strategic planning and implementation still focuses on the individual country, with insufficient efforts to address highly connected malaria zones across or within national borders. Given the significant population and parasite movement within Southern Africa, a

successful regional strategy must go beyond targeting only border areas and/or migrant populations and also address the entire ecosystem of regional connected catchment areas. The lack of involvement of district health management teams – arguably the ones who have an in-depth understanding of, and information on, transmission patterns and potential effective responses – is a further complicating factor.

Areas of focus

- Set up detailed operational plans identifying coordinated intervention packages to address specific regional elimination gaps within defined 'connected communities';
- Develop packages of interventions at sub-regional level consisting of a mix of vector control, case management, and strong surveillance activities (the key area to invest is to simultaneously mop down transmission and do proper case management);
- Ensure a competitive process in launching tenders for sub-regional packages of intervention with clear specifications;
- Support sub-regional stock-piles of key commodities to respond to possible outbreaks (this should not replace or cover up poor national supply management and planning, to which non-availability of commodities is often attributed);
- Allocate resources to sub-regional areas driving regional malaria transmission (rather than dividing up by countries which would limit impact in any one country or on elimination prospects);
- Support sub-regional technical coordination via the use of current or newly created technical councils, led by one of the national program director of the concerned countries. This would also enhance the willingness to share data and information;
- Involve district health authorities into micro-level planning, quality control of operation, human resources capacity training, plans for synchronized interventions, supervision and follow-up of program related measures. This should include short assessment of training needs.

Priority area 3: Develop a long-term financing strategy and establish a fund facility for the whole E8 region

The current fiscal space to finance malaria elimination in the region is becoming tighter. The Global Fund malaria funding in E8 front-line countries and to a lesser extent the second-line countries will decrease in future funding cycles. At the same time, these countries – as well as the E8 region as a whole – lack a properly and comprehensively costed regional financing plan for sustaining the gains and preventing reintroduction. There is currently no clear strategy to mobilize additional resources from non-traditional donor sources, backed by the development of a solid E8 costed strategy. There is an opportunity to help the E8 "walk their talk" as per the SADC recommendation to develop regional and multi-country funding mechanisms and encourage domestic financing, supported by partners. Possible financing options include debt conversion schemes, SIB, DIB and income levies. The E8 should also think carefully of the "who" and what other stakeholders need to be brought to the table as part of a regional initiative to address long term financing. Finally, the financing strategy should address both long-term needs but also immediate funding gaps.

Areas of focus

- Develop a longer-term financing plan based on comprehensive E8 strategy (including investment case), to incentivize domestic resources, create access to new regional funding sources including the private sector, as well as exploring innovative financing;

- Envision establishing a blended financing facility inspired by the model developed in the RMEI.

Priority area 4: Strengthen the E8 regional strategic steering capacity to lead the vision, and sub-regional technical coordination to guide and oversee the interventions

In the current governance arrangement, there is a gap between the political (E8 Minister's sub-committee) and the technical (E8 Technical sub-committee) regional responsibilities, which prevents the E8 to pro-actively steer the initiative by challenging the status when needed. This gap could be filled-up by an E8 board reflecting a regional elimination thinking with expanded mandate reporting to the E8 Minister's sub-committee. There should also be a clearer delineation between; on the one hand, the governance and oversight role of the E8 as a governance body for high level monitoring, advocacy and resources mobilization; and on the other hand the E8 sub-regional technical forums to supervise packages of intervention. The challenge is to support a strong E8 multi-partner governance mechanism (Expanded E8 Board) that can steer and champion the SADC vision, while at the same time allowing necessary flexibility to sub-regional public-private operation unit(s) to implement under the technical guidance and coordination of regional council (model of MOSASWA).

Areas of focus

- Support an empowered and accountable E8 Board with expanded mandate (with a strong secretariat) in charge of priority area 1, 2, 3, and supported by a strong monitoring team (as described in priority area 5 below), reporting directly to the E8 Minister's sub-committee;
- Revise membership with accountable members representing their constituencies with clear terms of reference and deliverables;
- Delineate the role of the E8 secretariat between 1) supporting the E8 Board, its oversight committee, the EPR, and 2) E8 as a possible fund manager;
- Support sub-regional technical coordination via the use of current or newly created technical councils, led by one of the national program directors of the concerned country;
- Assess needs of capacity building, and establish a coordinated partner's platform to leverage technical assistance/expertise as required.

Priority area 5: Support a strong monitoring and alert mechanism through reinforcing regional data sharing and emergency response

To support effective monitoring of the implementation process and evaluate impact, an independent monitoring mechanism would allow the E8 Board to make key decisions in real time. In 2016 and 2017, the region has seen the emergence of outbreaks to which the E8 was not prepared nor equipped to act rapidly. While the newly established Situation Room is providing key information and enhancing data sharing, the E8 would benefit from having a mechanism to translate this information into concrete action by providing solution and/or elevating the issue to the right political level when needed. This mechanism should be able to question the status quo and confront difficult issues in an independent fashion, and as a sub-set of the E8 Board, link up with the newly established Situation Room, as well as with the E8 Technical Committee. Its role could include informing the E8 Board to adequately fulfil its mandate and govern a large set of operation to ensure investment is effective and efficient; inform the E8 board with real-time feedback so it can use the data for

strategic allocation and support decisions; inform funders on implementation effectiveness to ensure value-for-money of the investment towards elimination; and provide real-time implementation bottleneck analysis to keep investments on track.

Areas of focus

- Support the establishment of an independent monitoring mechanism, working for the E8 board. The membership would include a group of independent experts;
- See opportunity to link the mechanism to the WHO oversight committee (currently Botswana, Swaziland and South Africa are part of the 22 oversight committee countries).

III. Recommendations

Specific to the Global Fund

This section makes some recommendations to the Global Fund on specific areas to support under the catalytic envelope to support the priority areas outlined in the previous section.

Request the E8 Board to submit a delineated expression of demand for malaria elimination, including:

- A solid data analysis on cross-border transmission to better serve the purpose of malaria elimination;
- A plan using data to determine the geographic areas to prioritize based on regional priorities (not national priorities);
- Based on the above information, develop sub-regional packages of interventions combining a mix of vector control, case management, elimination and surveillance activities; define the right combination of malaria elimination specific activities and population coverage; support existing interventions of the current grant that have shown impact as a result of the on-going evaluation; tender out sub-packages of intervention with clear specification to find best implementing entities;
- Submit a proposal including a financing gap analysis for malaria elimination in the whole E8 region. It should be an expression of demand that delineates how much of the resources under the catalytic envelope will be used to support the E8 overall initiative for the advocacy, resource mobilization and monitoring activities, and how much resources will be allocated to implementation;
- Submit a proposal that includes careful analysis of barriers to data-sharing and robust strategies for how to overcome them;
- Develop a long-term financing strategy including domestic as well as innovative financing tools such as bonds;
- Support a solid monitoring mechanism that would report to the E8 board;
- Leverage WHO malaria elimination support at country level.

A two-step approach

Given that stronger data analysis informs which tailored packages of interventions are to be supported, the Global Fund grant should allow flexibility to re-allocate resources

to different areas and interventions based on emerging data. Therefore we propose the following calendar:

Year 1: Focus on developing data-analysis framework, and subsequently develop tailored sub-packages of interventions; maintaining and expanding impact interventions of current grant(s) based on 2018 evaluation outcomes (E8 grant) and 2019 (MOSASWA); Restructuring E8 governance structure as per priority area 4;

Year 2-3: Support new packages of interventions through tendering process by sub-region; develop a financing plan including the establishment of a fund facility (looking at bank options, ADB?). In the meantime continue working with the current E8 secretariat as a PR until a transition is operated.

Request a revision of the E8 governance structure and coordination

- Request to E8 board to expand its mandate to oversee the overall E8 region;
- Revise the membership structure to become the main strategic steering unit for the whole region. The board should include voting membership from each ministry of health (at PS level) and non-voting members from NMCPs. Partner's members would need to be selected to best represent their "constituencies" with defined terms of reference and deliverables;
- Recognize and support sub-regional technical council mechanisms that would be led by the NMCP managers to ensure technical guidance, coordination of synchronised interventions as needed between/among countries, with strong involvement of health district authorities;
- Engage district health staff in the selected geographies to help guide more aggressive interventions;
- Request the E8 to distinguish the role of the E8 secretariat in its support to the E8 board, and in its role as a current fund manager (with the possibility to transition to another regional organization).

Streamline Global Fund secretariat management and funding arrangements

- Have a single Country Team in charge of the E8 grant(s) and the 4 front-line countries;
- Consider for the following allocation period to merge country allocation of transitioning countries within a single regional support envelope.

Enable WHO to specifically support elimination

- Consider enhancing WHO capacity to play a stronger role in setting-up a regional data-sharing platform with disaggregated data;
- Consider leveraging WHO global support through declaring the Elimination as a "special initiative".

Specific to the SADC-E8

- Expand the mandate of the current E8 secretariat Board (rebranded E8 Board);
- Delineate roles of the E8 Board as the strategic unit for the whole region, with E8 technical forums as leading technical bodies to oversee sub-regional tailored set of interventions;

- Consider opening a seat at the E8 Board from WHO-GMP to leverage global level engagement;
- Cross-fertilize with other regional elimination initiatives – (RMEI for the blended financing mechanism, and RAI2E for the Independent Monitoring Team supporting the RSC);
- Consider using malaria elimination as an entry point to integrate surveillance within other communicable diseases as part of the broader health security agenda;
- In the view of expanding the E8 vision to other SADC countries, consider moving at some stage the E8 to Zambia, given its strategic location of sharing eight borders with malaria endemic countries.

B. CORE REPORT

I. Introduction

1.1 Background

In recent years, national malaria programs and the international community have increasingly focused on eliminating malaria through regional approaches. Various initiatives have been launched in several parts of the world, including Southern Africa, Latin America, the Arabian Peninsula, South East Asia and the Pacific region, and Eastern Europe.

Under the Southern African Development Community (SADC) Heads of States, the Elimination 8 (E8) initiative is a sub-regional initiative supported by eight Ministers of Health to address the barriers to malaria elimination by facilitating multilateral collaboration. The countries involved are delineated by four 'front-line' countries (Botswana, Namibia, South Africa, and Swaziland) and four 'second-line' countries (Angola, Mozambique, Zambia and Zimbabwe). The initiative is supported by an E8 Strategic Plan 2015-2020. The aim of the plan is "to accelerate zero local transmission in the four front-line countries by 2020 through the provision of a mechanism for collaboration and joint strategic programming".

Under the E8 initiative, the Global Fund supports two different grants: the E8 grant and the Mozambique-South Africa-Swaziland (MOSASWA) grant. Both the E8 and MOSASWA grants receive funding from the Global Fund (as well as other financiers) through two separate grants, ending in October 2018 and December 2019 respectively.

The E8 grant operates in all eight countries through a mix of coordinated interventions including defining movement of people and parasites, refining vector management strategy, providing prompt and effective diagnosis and treatment, and integrated surveillance.

The MOSASWA grant, covering Mozambique, South Africa and Swaziland, is a cross-border malaria initiative, whose aim is to create a regional buffer zone of indoor residual spraying (IRS) in Maputo province in order to reduce the importation of malaria cases from Mozambique to South Africa and to Swaziland.

1.2 Scope and main activities of the review

The review focused on the Global Fund governance and management arrangement of regional malaria funding in the eight countries in Southern Africa. This review aims to provide the Global Fund with analysis on the current situation in the region with regards to malaria elimination, and to make strategic recommendations on how to best invest its US$ 20 million set aside from the catalytic investment envelope for the period 2019-2021 to support the E8 achieving its goal.

As per the terms of reference, the objectives of this review are to:

1) Conduct extensive consultations on the current approaches to financing, oversight and governance of malaria elimination in Southern Africa in order to elaborate strategic options for the Global Fund's Catalytic Investment, mandated by the Board, that would be complementary to the on-going or planned interventions in country grants, also considering how the limited country allocations are being prioritized in the relevant countries;
2) Review progress and evaluate strengths and weaknesses of the MOSASWA and E8 grant implementation by the two Principal Recipients (PRs), as well as coordination (including,

but not limited to the Regional Coordination Mechanisms (RCM), MOSASWA and E8 activities, other coordination mechanisms such as SADC, national Country Coordinating Mechanisms (CCMs), as well as key partners);

3) Recommend a best way forward based on prioritization of possible options within approaches elaborated through the consultations, considering technical and political feasibility of options, strengths and weaknesses of multi-country grants, governance and performance oversight options and the funding availability.

1.3 Review Methodology

This review was carried out by the consortium "Health Management Support Team – Health Focus" and comprises a desk review; a series of key informant interviews at the Global Fund in Geneva, at regional and country level; an online survey; and field visits.

For the desk review, key documents and reports were obtained from the Global Fund and E8 Secretariats, the various stakeholders, and through additional online searches (Annex 1: Bibliography).

A total of over 50 interviews were conducted with the E8 and MOSASWA initiatives' key partners, government staff, Global Fund secretariat teams and main stakeholders involved in supporting the E8 vision (Annex 2: List of Informants). A semi-structured questionnaire was used for phone and face-to-face interviews (Annex 3: Inception report).

An on-line anonymous questionnaire was sent out by email via the E8 secretariat monthly bulletin. The questionnaire sought opinions on program performance, regional governance, how the initiatives are responding to the E8 vision and strategy, as well as the regional partnership. The responses from the questionnaire have been factored in the report analysis.

The review team also made six brief (national level) country visits to Namibia, Swaziland, Zimbabwe, Zambia, Mozambique and South Africa. Trips to the field were conducted in Namibia (bordering with Angola), Zambia (bordering with Zimbabwe and Botswana), and on the Swaziland-Mozambique border.

The review team analysed the organizational set-up, the progress made so far in terms of the achievement of set objectives and how both regional initiatives are bringing added value to national programs to reach their elimination goal. This review was not intended to comprehensively evaluate the current E8 and MOSASWA grant performance, or to design a new approach to malaria elimination in the region. Rather, it aims to identify overarching areas that should get prime attention to best support the E8 initiative in the future.

Limitations of the review included the unavailability of certain key stakeholders – in particular, ministers of health could not be interviewed. In addition, there was very limited time spent in some countries.

In the first section, this report provides an overview of the malaria situation in the Southern African countries of the E8. It then continues with a description of the current response to malaria control and elimination in the region, specifically the E8 and MOSASWA initiatives. Subsequently, it describes the current governance and management mechanisms in place at regional and sub-regional level. Based on interviews and observation, the report provides an analysis on main areas that constitute a challenge. There is then a section on the way the Global Secretariat portfolio is currently organised, as well as options to align to the new funding and the SADC elimination agenda. It then highlights some of the challenges and identifies keys

areas that should be prioritised for funding the E8 vision. Finally, recommendations are given on the possible ways forward for the Global Fund to invest resources with the view to leveraging other financial and technical support.

II. Overview of Malaria in Southern African and E8 Countries

2.1 General context

The SADC is a regional organization established in 1992 with the aim of supporting economic development among its 15 member states through regional integration. In recognition of the close link between health and economic growth, SADC has made the health of its populations a priority and calls upon its member states to harmonize their goals, policies, guidelines, protocols and interventions, including those for malaria control and elimination.

The E8 developed a **Strategic Plan 2015-2020** that outlines a set of objectives, strategies, and activities to be implemented systematically in order to ensure harmonization and synchronization of operations and activities.

The vision is to have a malaria-free Southern Africa with the goal to enable and accelerate progress towards zero local transmission in the four frontline countries by 2020, and in second line countries by 2030. Through the provision of a joint platform for collaboration and joint strategic programming, the initiatives' objectives are:

1. To strengthen regional collaboration in order to achieve elimination in each of the member countries;
2. To elevate and maintain the regional elimination agenda at the highest political levels within the eight countries;
3. To promote knowledge management, quality control, and policy harmonization to accelerate progress towards elimination;
4. To facilitate the reduction of cross-border malaria transmission; and
5. To secure resources to support the regional elimination plan, and to ensure long term sustainable financing for the region's elimination ambitions.

The Strategic Plan is used to target available, and mobilize additional, resources. Empowerment and ownership of the implementation of interventions at the district and community level is central to the success of this strategy - remote communities, migrants, and mobile populations are most vulnerable, and they are also central to the elimination strategy.

Over the course of this strategy, the E8 Initiative aims to work towards eliminating the remaining malaria cases in the border-areas of the four frontline countries – Botswana, Namibia, South Africa, Swaziland, and southern Zimbabwe – by 2020. In Angola, Mozambique, Zambia, and the rest of Zimbabwe, consolidation of control activities will begin the transition to elimination for this group of second tier countries, while also supporting the containment of transmission and prevention of reintroduction to those areas that have already achieved elimination.

Following a resurgence of malaria cases across a number of the E8 countries in recent years (see Section 2.2), a call for action was launched for a review of malaria elimination strategies. As a result, the E8 Technical Committee adopted a set of key strategic shifts that will define an accelerated approach to regain momentum for the 2020 targeted milestone. The **"Regional Elimination Acceleration Plan"** consists of three pillars – integrated vector management, parasite and patient management, and epidemic management – which are supported by two enabling goals, and together form a framework for coordination in accelerating the

achievement of zero malaria transmission in the region. The regional strategy will assist individual countries to optimize the implementation of their strategic plans, while identifying additional interventions to be deployed to specifically target major regional sources of infection.

One of these is the establishment of the regional epidemic preparedness and response team – the Situation Room – which is supported by the World Health Organization (WHO), The African Leaders Malaria Alliance (ALMA), Southern Africa Regional Network (SARN) - Roll Back Malaria (RBM), Global Public Health, and the E8 Secretariat. The main objectives evolve around assisting countries to monitor and prepare for malaria epidemics in the region, provide technical and material resources for investigating epidemics and recommending high impact interventions, and support national malaria programmes to respond timely to epidemics and reverse upsurge.[1]

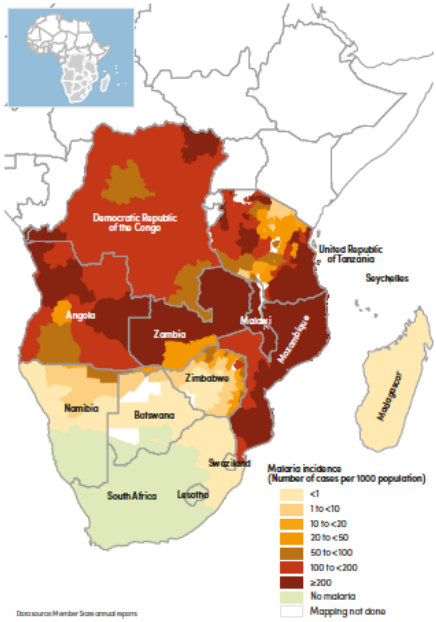
The Regional Elimination Acceleration Plan is expected to be finalized by March 2018 and will serve to guide future investments in national and regional strategies.[2]

2.2 Regional malaria situation

The burden of malaria has decreased dramatically within the past decade in parts of sub-Saharan Africa, mainly as a result of the commitment to eliminate malaria in the region and the rapid scale-up of interventions.

Currently, the front-line (southern) countries are not far from being able to eliminate malaria, while other countries in the E8 region remain affected by very high malaria incidence (see Figure 1). For instance, Botswana sees 0.1 malaria cases per 1,000 people, while this figure for Zambia is 336 per 1,000. Overall, in the E8 countries 91 million people are at risk of malaria.

Figure 1: Malaria incidence in the SADC region, 2016



Source: SADC malaria report 2017

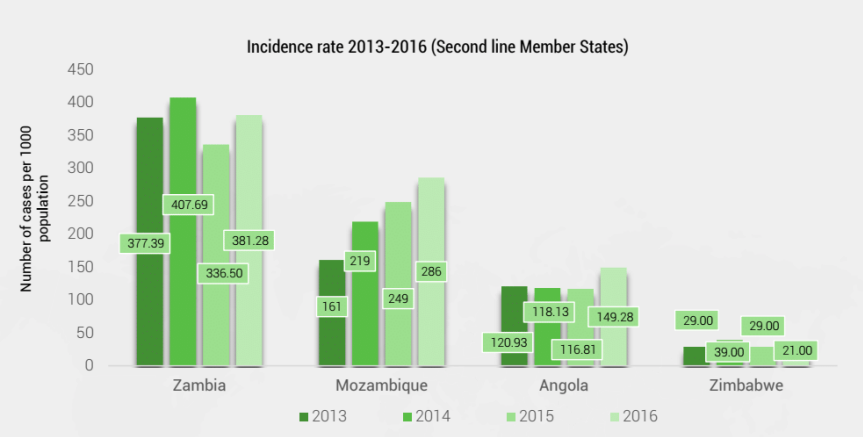
[1] Regional EPR Action Plan (version Oct 18, 2017; PowerPoint v2)

[2] E8 2017 Annual Report – *preliminary version*

However, worryingly, reductions have not been uniform between and within countries, and some areas are experiencing a resurgence of malaria cases instead. In 2016, 60,414 malaria-related deaths were reported in the whole SADC region – a 4% increase from 2013 – with most of these occurring in Angola and Democratic Republic of the Congo (DRC).[3]

Incidence rates in the E8 second-line countries have remained more or less stable (Zambia, Zimbabwe) or shown an increase (Mozambique, Angola) over the period 2013-2016, as shown in Figure 2.

Figure 2: malaria incidence rate 2013-2016 (second-line countries)



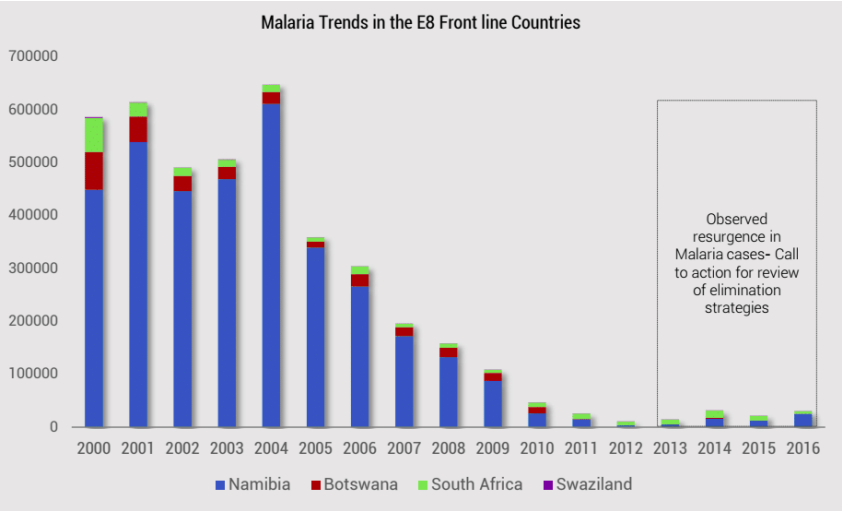
Source: E8 report update November 2017

Across much of the E8 region, outbreaks in malaria cases are detected through localized outbreaks, particularly so during the 2016-2017 transmission season. Surveillance data (Nov 2016-Feb 2017) from 65 E8 border districts showed that in 10 districts out of 65, a 10-fold increase in the number of malaria cases was observed compared with the same period of the previous season.[4]

Figure 3: Malaria trends in E8 front-line countries 2000 – 2016

[3] SADC Malaria Report 2017

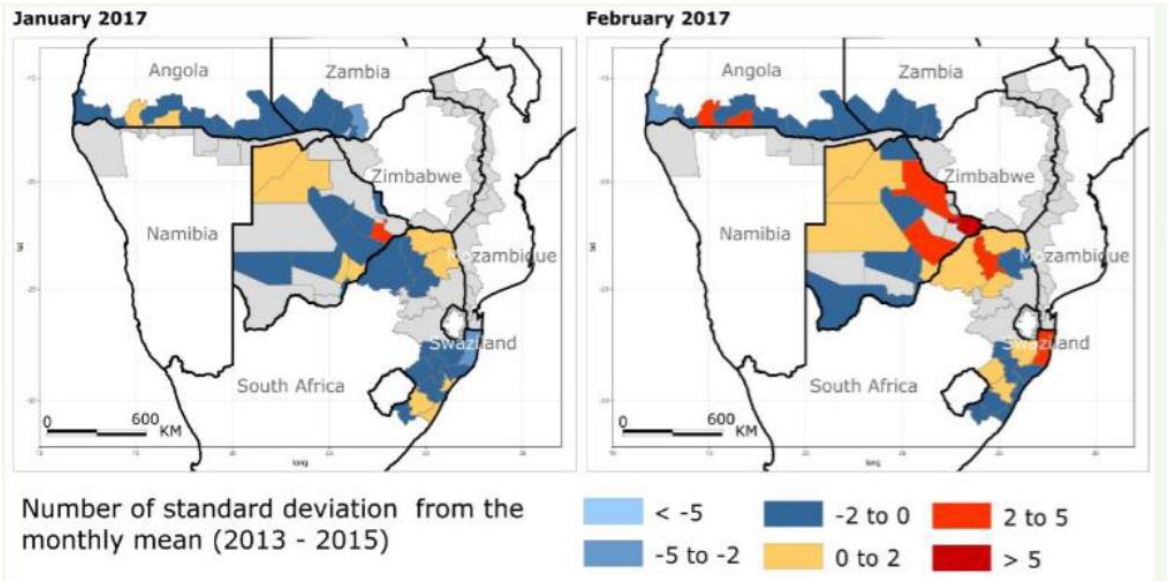
[4] E8 2017 Annual Report – *preliminary version*



Source: E8 Secretariat Board Update Nov 2017

Early in 2017, E8 countries began to report a series of malaria outbreaks (see Figure 4), whose reach extended across country borders.[5] Botswana and Namibia experienced the sharpest increase in transmission, relative to their 2016 levels; Zimbabwe, Mozambique, South Africa, and Swaziland also experienced outbreaks in parts of their malaria-prone areas. In South Africa, and Botswana, malaria transmission was reported in districts which had previously been considered malaria-free.[6]

Figure 4: Change in malaria cases – standard deviation from the monthly mean (2013-2015)



The 2017/2018 season has also started early with sharp increases in malaria cases reported, contrary to low case reports in August, September and October in past seasons. Towards the end of 2017, South Africa and Swaziland experienced unprecedented increases in malaria

[5] E8 Situation Room: Regional Surveillance Bulletin Sept/Oct 2017, No 2

[6] E8 2017 Annual Report – *preliminary version*

cases, particularly in areas which have not reported cases in the past 5 years.[7] The E8 Situation Room has identified a number of actions to support the response to the recent outbreaks in Swaziland and South Africa.[8]

Overall, recent resurgence of malaria across much of the E8 region since 2014 – and even more so recently - threatens to erode the progress made over the last few years in all E8 countries, particularly in the frontline four.

The non-declining incidence and observed resurgence in cases is to some extent attributed to external factors such as population mobility and climate change. Migration routes between countries can be used to partially explain malaria transmission; for instance, in Botswana, Namibia, South Africa and Swaziland, imported cases from high-incidence neighbouring countries make up the majority of malaria cases reported, and occur specifically in border areas.[9]

Changes in climate and environmental conditions can be associated with heavy rainfall and flooding, which creates favourable environments for malaria transmission.[10] These factors can also reinforce one another: for example, extreme weather events can result in population displacement, including people who may host the parasite, and also impede access to health services.
An analysis of the recent outbreaks ultimately concluded that, while heavy rainfall had been experienced across the region, an important contributing factor was the weak national programmes that were made vulnerable by sub-optimal coverage of key interventions (for instance low IRS coverage and stock-outs of essential medicines and supplies) and weak program management[11]. In addition, there was inefficiency of surveillance and response systems to rapidly respond and react to the increasing transmission. A more thorough entomological surveillance is required to understand potential changes in vector composition and behavior, and associated changes in receptivity. Waning political commitment and reduced domestic funding[12] further aggravate this situation. Given that weather prediction for 2017/18 is pointing to the likelihood of similar transmission patterns in the first quarter year 2018, countries should address programme management weaknesses and intervention coverage.

III. Current Response to Cross-border Malaria in the E8 Countries

3.1 Regional cross-border malaria initiatives

A number of regional and cross-border initiatives on malaria have been established in the region since 2006. The major ones are the Trans-Kunene Malaria Initiative, the Trans-Zambezi Cross-border Initiative, the E8 Initiative and MOSASWA Initiative.

Other smaller ones include the ZAM-ZIM (a subset of the Trans-Zambezi Malaria Initiative); an initiative between Botswana, Mozambique, South Africa and Zimbabwe (formerly the Trans-Limpopo Malaria Initiative); and an initiative between Malawi,

[7] E8 Malaria Monthly Bulletin – Sept 2017

[8] E8 malaria Situation Room report; Oct 2015, 2017

[9] SAMP, 2017 Harnessing Migration for Inclusive Growth and Development in Southern Africa: Special Report

[10] SADC Malaria Report 2017

[11] E8 Situation Room: Regional Surveillance Bulletin Sept/Oct 2017, No 2

[12] In the E8 countries from US$ 100 million in 2015 to US$ 98 million in 2016 (SADC malaria report 2017)

Mozambique and Zambia. The latter three are limited by insufficient financial resources and/or are not, or only partially, implemented. It should however be noted that the Global Fund is used to provide regional malaria grants to Lubombo Spatial Development Initiative (LSDI) through collaborative interventions between Mozambique, South Africa and Swaziland[13]. The grants were used as successful examples as a sharp decline of cases was observed through increase of services. To the best of our knowledge, the impact of these smaller initiatives has not been formally evaluated.

The Trans-Kunene Cross-border Initiative was created to accelerate malaria elimination in Angola, Namibia, and Zambia, through the detection of sources of malaria infection in southern Angola, northern Namibia and western Zambia. The Initiative aims to generate evidence for the establishment of malaria-free areas in southern Angola. It is funded by the Bill and Melinda Gates Foundation (BMGF) (US$ 4.2m) and domestic co-financing (US$0.3m) through the E8 Secretariat so to align better with the broader regional coordination efforts and integration of regional initiatives.

The Trans-Zambezi Cross-border Initiative was established by the SADC health ministers in April 2006, with the aim of accelerating malaria control and elimination in the districts of Angola, Botswana, Namibia, Zambia and Zimbabwe that converge at the Zambezi River. A memorandum of understanding was signed in 2011. The Isdell Flowers Foundation is a key donor of this initiative[14].

The other two main regional malaria initiatives are the E8 and MOSASWA, supported by the Global Fund (and other partners) through two separate grants. These initiatives are described in the following sections.

3.2 E8 initiative

The Global Fund serves as the main funding partner to the E8 initiative through a US$ 17.8 million 3-year grant (October 2015/ September 2018). As of January 2018, the Global Fund has disbursed US$ 9.1 million.

In addition, the BMGF awarded a US$4.2 million grant for a period of 18 months (ending in December 2018), focused on piloting interventions to target sources of malaria infection across borders. In addition, UCSF (Global Health Group) provided the seed funding that catalyzed the E8, and has renewed its funding to the E8 for 2017 and 2018.[15]

[13] LSDI received two grants respectively US$ 28,281,060 (MAF-202-G01-M-00) and US$ 6,501,141 (MAF-506-G02-M)

[14] https://www.jcflowersfoundation.org/isdell-flowers-cross-border-malaria-initiative.html

[15] E8 Secretariat Board Update Nov 2017 (powerpoint)

Table 1: Overview of funding sources E8 Initiative

	2016	2017	2018
Global Fund	$ 2 144 672	$ 6 506 067	$ 9 166 292
UCSF - GHG	$ 450 850	$ 842 016	$ 1 077 215
BMGF	$ -	$ 1 399 699	$ 2 799 399
Isdell Foundation		$ 50 000	
	$ 2 595 522	$ 8 797 782	$ 13 042 906

Source: E8 Secretariat Board Update Nov 2017

Global Fund E8 grant

The E8 grant is supporting the E8 Strategic Plan 2015-2020 that is aligned to the SADC Malaria Elimination Framework. It outlines core strategic objectives to strengthen regional coordination by maintaining the elimination agenda at the highest political levels.

The goal of the grant is to enable and accelerate zero local transmission in the four front-line countries by 2020 (and the second-line countries by 2030) through the provision of a joint platform for collaboration and joint strategic programming. The strategic objectives of the grant are to:

1. Strengthen regional coordination in order to achieve elimination in each of the E8 member countries;
2. Expand access to early diagnosis and treatment for border communities as well as mobile and migrant population; and
3. Strengthen regional epidemiological and entomological surveillance systems by the end of 2017.

These objectives are implemented through core priority programme areas: case management; active case detection; regional surveillance database, analysis, and feedback; epidemic preparedness and response; and a regional laboratory.

The grant focuses mainly on the establishment of 70 border health facilities on five key international borders between high and low transmission districts of E8 countries. A mixed methods survey was conducted in 2015-2016 to identify locations for the malaria posts. The goal of these border malaria health posts is to improve access to malaria testing and treatment services, targeting two key populations at risk of malaria: (i) Mobile and Migrant Populations (MMPs), given the risk of infection importation to and from countries with varying risks of transmission, and (ii) underserved residents of border districts.

Malaria border posts fall into two categories: Malaria Basic (mobile units providing malaria diagnosis and treatment) and Malaria Plus (static units offering a more comprehensive package of primary health care services). To complement these activities, active surveillance to proactively diagnose and track potential infections is conducted by the Surveillance Units. The teams also monitor all individuals with a positive test, conduct reactive case detection, and identify vector breeding sites.

The current E8 grant was submitted by the E8 recognized as a "Regional Organization", with the support of the Southern Africa Roll Back Malaria Network (SARN), a sub-set of the RBM that was acting as E8 Secretariat for the SADC. An E8 Secretariat was created to sign legal agreements with the Global Fund and has become the Principal Recipient. The E8 Secretariat board was established later to act as an oversight body (see section 4.1 on E8 Governance structures). Currently, reports are prepared by the E8 Secretariat and reviewed by the E8 Secretariat Board through an oversight committee group.

The E8 Secretariat has signed two contracts with *Ajuda de Desenvolvimento de Povo para Popo* (ADPP) Mozambique and ADPP Angola in order to establish and implement the malaria health posts and surveillance package together with social mobilization of communities.

Progress

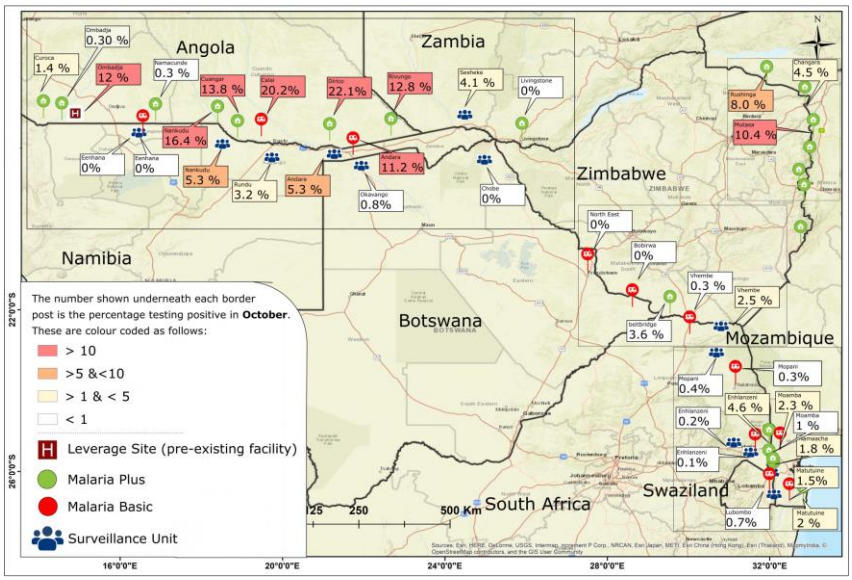
By the end of 2017, the target was to have 50 border posts established and functional to diagnose 67% suspected malaria cases and treated 76% confirmed cases, without stock-out of Rapid and Diagnostic Testing kits (RDT) and Artemisinin-based Combination Therapy (ACT) during each reporting period. In line with the third strategic objective to strengthen regional epidemiological and entomological surveillance systems, 74% of border district health facilities in front-line countries and 42% in second line countries should have submitted timely and complete monthly surveillance reports to regional surveillance system.

According to the Performance Framework, progress on implementation of activities is behind schedule. Programmatically, the overall performance of the grant was rated as C as of July 2017, with an average performance of 19% of the two indicators reported on and reviewed within the period.

This mission also noted the low absorption rate of 34%, which was caused by various factors including the late selection of contractors in countries, long process of establishment of the containers for malaria posts due to tender process and government protocols, as well as data sensitivity issues and lack of data-sharing (the issue is discussed further in the report).

The E8 Secretariat Board Update of November 2017 reported that 46 malaria posts and surveillance units have been established, and 120,000 people were tested since April 2017, with a positivity ranging from <1% (Botswana) to 22,1% (Angola).

Figure 5: E8 malaria border clinics Oct 2017 (positivity rates as of Apr 2017)



Source: E8 Bulletin November 2017

Table 2 summarizes an update on progress to targets set by December 2017. As shown, some indicators are more or less on target (number of malaria posts established, investigation of positive cases), but stock-outs have occurred, and the number of people tested and treated is also significantly lower than envisaged.

Table 2: E8 grant progress against targets

Indicator and targets by December 2017	Progress
Proportion of malaria border health posts established and fully operational. **Target: 50**	Up to November 2017, **46** malaria posts have been established and are functional
Proportion of malaria border health posts without stock-outs of RDTs during each reporting period. **Target: 100%**	**Stock-outs** of RDT and ACT occurred during outbreaks. Currently, *Ajuda de Desenvolvimento de Povo para Popo* (ADPP) Angola purchased and maintained its own stock in addition to those provided by health facilities.
Proportion of malaria border health posts without stock-outs of 1st line malaria treatment (ACTs) during each reporting period. **Target: 100%**	
Proportion of suspected malaria cases that receive a parasitological test (RDT) at malaria border health posts. **Target: 67%** (2.250.811/3.335.876)	109,685 people tested and 2,450 positive cases. Although, the reported numbers are only up to September 2017, the results are **significantly lower** than the target, i.e. >2 million malaria suspects tested and more than 60,000 cases treated
Proportion of confirmed malaria cases at malaria border health posts that receive first-line anti-malarial treatment (ACT) according to national treatment guidelines. **Target: 76%** (68.401/89.742)	
Proportion of confirmed cases investigated (front-line countries). **Target: 80%**	Up to September 2017, 13 surveillance teams have been deployed across the borders. **95%** of positive cases were investigated by these teams.

Stakeholder's feedback

As outlined in the methodology, a number of interviews with key stakeholders were conducted, asking them – amongst others - about their views and opinions on the E8 grant.

Interviewees highlighted as a *key strength of the E8 grant the fact that it frees up resources for low-transmission areas in high-burden countries which are not prioritized for control efforts, thereby assisting neighbouring countries get closer to* zero local transmission. Some interviewees said that not all border districts were given adequate priority for acceleration of services, and the effectiveness of having a "fire wall" of health posts along the borders on malaria transmission and importation rates was questioned. A research study currently taking place will shed further light on this.[16]

In terms of *funding arrangements*, the funds for use in country are perceived as being implemented too vertically, and some feel that the bulk of the financial support is earmarked for coordination, with minimal funds available for implementation. However, others argue the contrary and feel that the money should be used to help reinforce the E8 initiative in its role of advocacy and to mobilizing additional resources.

While it should be noted that both the Global Fund and the E8 secretariats have reacted with a sense of urgency to emerging issues (specifically during the outbreaks), a design weakness

[16] A study is underway to evaluate the impact of border area malaria post implementation on access to malaria testing and treatment, malaria transmission and malaria importation rates is underway (baseline conducted end 2017, end-line planned for end 2019).

of the E8 grant mentioned was the *limited E8 project flexibility* and inability to respond in a timely and effective manner to needs and demand in the region. This was said to be (partially) due to conditions given by the Global Fund on what could be included in regional proposals.

On E8 Secretariat vs. countries, opinions were divided on the *extent to which the E8 grant is country-driven*: some interviewees commented on the strong involvement of National Malaria Control Programme (NMCP) managers and the Ministry of Health, ensuring political buy-in and commitment of the regional approach. Examples mentioned include the assessments done to identify key challenges to be addressed at a regional level (i.e. vector control coverage gaps), the establishment of the E8 technical sub-committee platform to share latest evidence and successful approaches, and the development of a system where countries can collectively and rapidly identify and respond to epidemics.

However, others perceived the structure of the E8 as too bloated and "telling countries what to do", thereby confusing national program country teams. The review team is of the opinion that this is more a perception than a reality as the E8 governance structure (Board and Minister's members) is responsible for defining and overseeing a structure which serves – with a regional perspective - countries agenda. The E8 was also said "not to have teeth" or leverage to ensure that countries are implementing interventions to reach elimination.

The stakeholders interviewed were also mixed about their views on the *management of the E8 grant*. Some said the E8 Secretariat is managed effectively with solid finance and Procurement and Supply Management (PSM) procedures (especially as compared to other regional institutions) and seen to have the leverage to standardize activities in the region. The E8 Ambassador was seen as having strong leadership, institutional memory, solid technical knowledge, diplomacy skills, and high-level relationship abilities.

At the same time, the E8 was also described as an *"emerging elite that is hesitant to share information, making sweeping statements rather than communicating about actual activities and interventions implemented*." Some officers in the E8 were also said to lack adequate experience required to be at the coordination level.

Findings from field visit

The review team conducted visits to three border areas to assess the progress in the field especially on the establishment and function of the malaria health posts. While the mission was not intended to assess technical aspects, some observation and feed-back received during the visit related to diagnostics, treatment, vector control, surveillance and management are captured in Annex 6 (Summary of Field Visits).

Issues noted included the voluntary nature of testing; the low sensitivity of tests used; non-uniformity of national treatment protocols applied; poor coordination of surveillance and IRS spraying activities between countries; and the lack of involvement of the district health offices in the E8 programme implementation.

MOSASWA Initiative

In July 2015, the government representatives of Mozambique, South Africa and Swaziland signed the MOSASWA Cross-border Malaria Initiative with the vision to attain a malaria-free Mozambique, South Africa and Swaziland. The MOSASWA initiative is a sub-regional initiative aligned with the E8 initiative and funded through a public-private grant.

The Global Fund approved the Concept Note for a private partnership 2017-2020 for a total of US$ 9.7 million, including US$ 4 million co-funding by a private sector group named 'Good Bye

Malaria' consisting of Nando's (the founder of the group), VODACOM, Bayer and Mozal. This grant was launched in Maputo in May 2017.

The MOSASWA Grant is still at early stages of implementation, with US$ 2.1 million disbursed by Jan 2018. A slight budget underspend in South Africa has been reprogrammed to allow for budget catch up in Year 2.

Global Fund MOSASWA grant

The grant aims to bring together the public and private sectors to accelerate the transition from control to pre-elimination of malaria in southern Mozambique, and from pre-elimination to elimination in Swaziland and South Africa. Its goal is to achieve zero local transmission in Swaziland, South Africa and Maputo province by 2018, and achieve pre-elimination (test-positive rate <5%) status in southern Mozambique by 2020.

The four objectives to be achieved under the grant are as follows:

1. Establish and operationalize the MOSASWA malaria cross-border initiative to coordinate, harmonize policies, strengthen subnational capacity and share expertise and strategic information among the three countries to accelerate to the goal of malaria elimination;
2. Expand and sustain access to malaria elimination interventions across the MOSASWA region with particular focus on MMPs, malaria risk localities and residents, to rapidly reduce and interrupt malaria transmission;
3. Strengthen capacity in the three countries for malaria surveillance, operational research and monitoring and evaluation to support elimination efforts, respond to outbreaks and resurgence, and generate evidence for intervention response;
4. Mobilize resources and advocate for increased and sustainable malaria financing to achieve and sustain malaria elimination. [17]

The grant's interventions focus on IRS activities, as well as case management, surveillance and Information, Education and Communication (IEC). A small portion of the grant is also used for providing malaria health post in the areas not covered by E8 Grant.

MOSASWA builds on the successful implementation of the LSDI, a local non-governmental organisation (NGO) currently acting as the main fund recipient. LSDI works with three implementing units in the three countries: in Mozambique, the grant is executed through the NMCP and the local NGO ChauChau Malaria; in South Africa, it is the NMCP and Humana People to People; in Swaziland the NMCP is the main implementing agency.

Progress

No Progress Update and Disbursement Request (PUDR) has been submitted thus far, and the first progress report will only be available by the end of January 2018.

[17] RCM MOSASWA Concept Note Feb 2016

Based on information received from the Principal Recipient (PR)[18], the grant is expected to exceed its targets. The indicator on the proportion of households in targeted area that received IRS during the reporting period is set at 93%, whereas by January 2018, 95% spray coverage has been reached in the four target districts in Mozambique.

The grant originally planned to fund four malaria border health posts in South Africa and Swaziland (two each) complimentary to malaria posts set up under the E8 grants. In South Africa, two mobile clinics are operational, testing migrant populations for malaria and actively reporting information into the national health system. In Swaziland, activities have been reprogrammed to focus on insecticide resistance monitoring and IEC campaigning.

Stakeholder feedback

A range of different views were shared by interviewees on the functioning of the MOSASWA grant. Most issues brought up by interviewees concerned the design of the programme. Firstly, on the positive side, the grant has a 'matched funds' arrangement, ensuring a strong involvement and buy-in from the private sector. The grant also focuses on supporting Mozambique to stay on track with achieving low transmission and sub-national malaria elimination in line with E8 Goals. Within Mozambique, the project seems to be mainly focused on Maputo province (although the plan is to expand) and not on other high-incidence areas located in the south of the country which also could be reservoirs of imported cases.

The focus on Mozambique has, however, also been highlighted as a weakness, with too little attention given to activities with the other two countries that form part of this grant (South Africa and Swaziland), and to coordination with other E8 countries or partners.

Some perceive the initiative as a somewhat parallel project to address a specific cross-border challenge. It is somewhat unclear how the initiative is embedded within the national or regional approaches or systems; for instance, little attention is given to malaria service delivery through community-based testing, and treatment and tracking needed to sustain the reduction on transmission achieved with IRS.

It was also felt that the limited scope translates in the fact that the initiative is solely structured around the Global Fund grant, whereas in comparison the scope of the E8 grant goes much beyond the Global Fund. This puts into question the sustainability of the initiative, which could face the same fate as LSDI1, the predecessor of MOSASWA that ended – despite its success – when private sector funding ran out.

Another observation was that the MOSASWA public-private partnership has gone through a learning curve in the recent years and that some perceptions regarding the lack of coordinated efforts refer more to the first year of the grant rather than the current reality.

IV. Governance, Partnership and Financing

4.1 Governance structures

The E8 and MOSASWA are two distinct initiatives that were initiated in parallel, at different times; the E8 started in 2009 and MOSASWA in 2015. As a consequence, each initiative has reached different levels of maturity. While both the E8 and MOSASWA

[18] Email correspondence Jan 19 2018

initiatives falls under the SADC-E8 overall vision and strategy, each work under a separate governance structure.

E8 Initiative Governance Structure

The E8 governance structure consists of different sections fulfilling various roles. An E8 governance manual was developed in 2017 and outlines in detail the responsibilities and processes of the E8 governance different organs[19]. A summary of the roles and responsibilities is described below.

The E8 Ministerial Committee is made up of the eight Ministers of Health from the member states, and is a recognized sub-committee of the SADC Joint Council of Ministers of Health and Ministers Responsible for HIV/AIDS. It was established through the Windhoek Resolution (2009), following the first convening of the ministers of health from the eight countries. This committee is the supreme decision-making body of the E8 that leads strategic and diplomatic dialogue on the regional partnership towards an E8 free of malaria on behalf of Member States. The E8 Ministerial Committee reports to the larger SADC Committee of 15 ministers of health. In 2015, a E8 Ambassador was selected, responsible for advocacy and diplomatic negotiation between member states to advance the collective E8 goal.

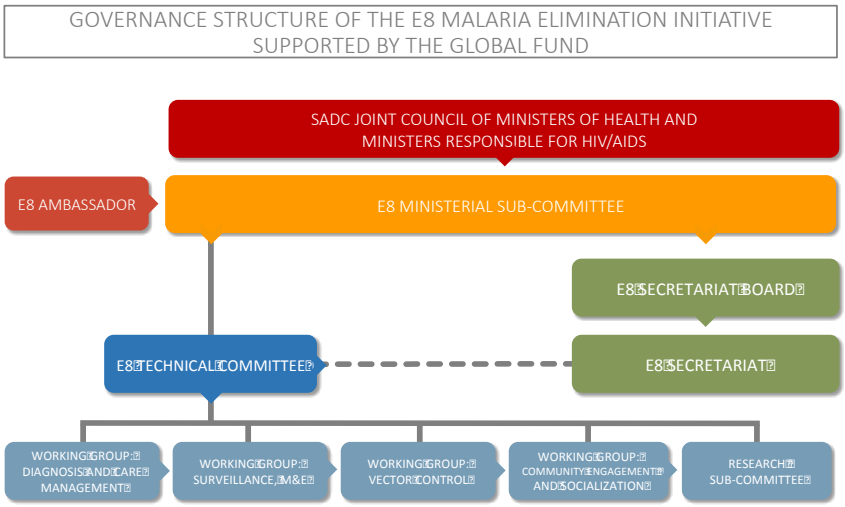
The E8 Secretariat board is mainly responsible for playing a stronger leadership role, ensuring meaningful participation with the E8 Technical Committee in the Strategic Plan 2015-2020 discussions at regional level, participating with the Technical Committee in the convening of stakeholders to engage in inclusive regional dialogue, and guiding the technical priorities and funding allocations. Its core functions are to 1) endorse (along with the E8 Technical Committee) regional malaria proposals; 2) nominate the PRs to implement these proposals; 3) oversee implementation of the approved grant/s and submit requests to donors for continued funding; 4) approve any reprogramming and submit requests for continued funding; and 5) ensure linkages and consistency between any regional health and development programmes.
While the E8 Board interacts with the MOSASWA, it only oversees its own E8 grant and there is no direct line of reporting from MOSASWA to the E8 Board. It should however be noted that in the last SADC Report from Ministers Meeting 2017, a section on the MOSASWA initiative progress was included for the first time.
The Board membership is composed of nine members. To avoid conflict of interest, National Malaria Control Program (NMCP) managers are non-voting members, and one NMCP manager represents the other country as ex-officio at the Board.

The E8 Secretariat translates E8 resolutions and plans into action, facilitating work across the eight countries, and facilitating the regional collaboration. The "E8 Secretariat Overview" further details the roles and functions of the Secretariat and its staff. The E8 secretariat is a Namibian registered, non-governmental organization that is currently the Principal Recipient of the E8 Global Fund grant.

The E8 Technical Committee is mandated to oversee, advise and recommend technical interventions to be implemented across the region towards elimination. It makes recommendations on E8 technical strategies and resolutions, and reports to the Minister's Sub-Committee. The Technical Committee is in turn supported by five technical Working Groups, namely Diagnosis and Case Management, Surveillance, Monitoring & Evaluation,

[19] BOARD GOVERNANCE MANUAL, Draft Version, May 14, 2017

Vector Control, and most recently Community Engagement and Research. The Technical Committee is also linked to the MOSASWA governance structure described in the following section. It is accountable to the E8 Minister's sub-committee and not to the E8 Board Secretariat.



In addition to the above, the E8 has created a Regional Monitoring Early Warning Preparedness and Response Team, the so-called "Situation Room", in September 2017**.** The need for better epidemic preparedness and response challenges was identified following the recent outbreaks. Its role is to ensure proper forecasting and quantification of malaria commodities required for emergencies, detect and deploy mitigating interventions before and during epidemics, and the ability to quickly detect and effectively respond to outbreaks through better coordination at regional and country level. The members are the NMCP managers and ALMA, RBM, WHO, an independent consultant and the E8 acting as Secretariat. They have weekly calls and develop a monthly report per country.

MOSASWA governance structure

MOSASWA is governed by the Health Ministers Forum, a Regional Council, a Regional Coordinating Mechanism, and Technical Committees.

The MOSASWA Health Ministers Forum provides oversight function for the implementation of the initiative. It reviews reports and provides guidance and regular feedback to the E8 Health Ministers forum (who in turn report to the SADC Health Ministers), supports advocacy for resource mobilization at the national, regional and global level, and serves as the main political interface between MOSASWA and the countries it represents.

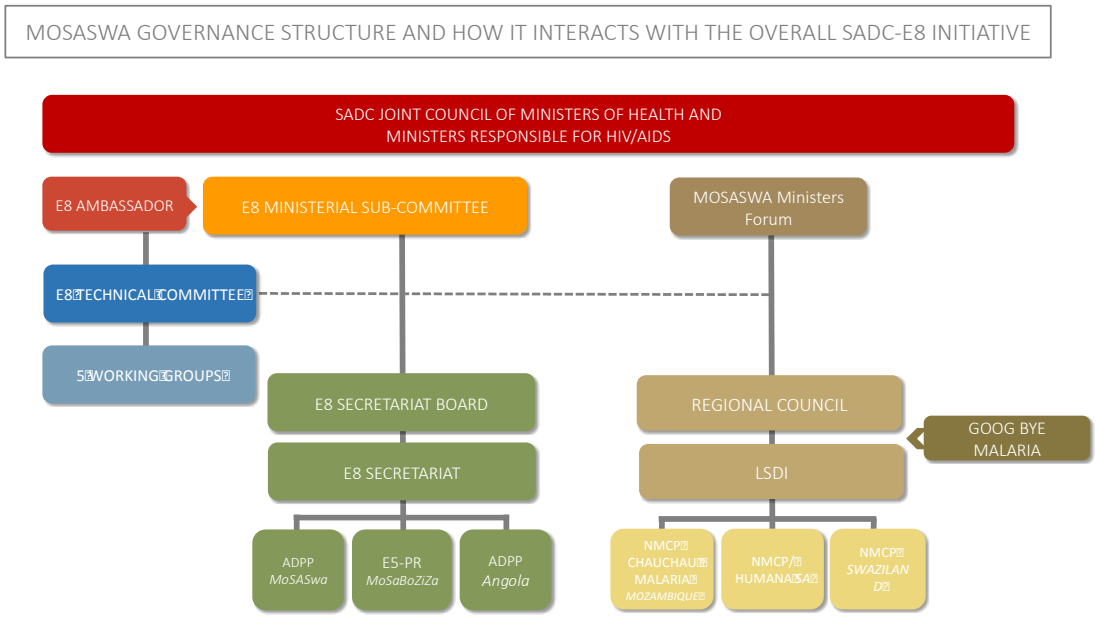
The Regional Council was established in July 2015 and is the main executive and coordinating body for this regional collaboration. The Principal / Permanent Secretary or designate from each of the MOSASWA countries form part of the Regional Council together with National Malaria Program Managers from each of the MOSASWA countries, developmental partners in the region (WHO, E8, International Organization for Migration (IOM), Clinton Health Access Initiative (CHAI), academic institutions and the private sector) and elected chairpersons of the operations committees. The Council is chaired by a Program Manager from within the region (currently Mozambique) and meets quarterly or more frequently if deemed necessary. It sets the policy and strategic direction of the MOSASWA regional collaboration and it is overall accountable to the MOSASWA Health Ministers Committee for the performance and

effectiveness of the goals of the partnership. There is no funding set aside to strengthen the Regional Council, which plays a pivotal role in supporting the MOSASWA initiative.

In order to sustain an effective and transparent regional collaboration, three Technical Committees were created: on Implementation, on Surveillance/Research/ Monitoring & Evaluation (M&E), and on Finance and Innovations. Membership composition for each committee is determined by the Regional Council.

In addition to the above, a Regional Coordinating Mechanism (RCM) was created in August 2017 to provide oversight for the Global Fund grant.

The methods of collaboration between the E8 and MOSASWA governance structures are described in the simplified chart below.



In summary, both governance structures seem to be functioning based on well-drafted manuals. The E8 Initiative has good communication channels; it is supported by a strong secretariat that has processes in place and receives regular technical support from the E8 technical committee. In addition, the newly established Situation Room is a big step forward to improve data sharing for better emergency response. In the same vein, the MOSASWA is also functioning well under the Regional Council technical guidance with strong NMCP leadership. Finally, although both governance structures have evolved separately, it should be recognised that the various organs from each structure have started to interact better in 2017.

However, the current setting doesn't reflect the overarching E8 leadership initiative model that would ideally be overseeing the whole portfolio initiatives of malaria elimination grants, including MOSASWA. There is confusion in the fact that the E8 Secretariat – which is central in the E8 governance structure – is acting as E8 Secretariat for the E8 Board, the oversight committee, as well as the Situation Room, while at the same time doing the fund management of grants. It would make more sense to delineate better the E8 initiative with a Board that is the unique strategic unit for the whole region, supported by a secretariat, and have a separate mechanism to distribute the financing, either through a single, (preferably) or various facilities. In addition, it is unclear how each of the technical fora – the E8 Technical Committee and the MOSASWA Regional Council – link to the current E8 Board. The direct line of

reporting from the E8 Technical Committee is indeed under the E8 Minister's sub-committee. As a consequence it may not provide the E8 Board with sufficient technical support to act as a strong strategic unit to steer the E8 agenda. Another confusion is the fact that the Regional Council, which we understand is a technical body for MOSASWA, is also in charge of "policy decisions". We think that policy decision should be more the role of the E8 Board.

4.2 Partners Landscape

There is currently a particularly strong and proactive multi-stakeholder engagement in the region to support malaria elimination. The partner countries and the regional initiatives are indeed supported by a large range of financiers, networks, technical and academic partners.

The main **external financiers** include the Global Fund, the BMGF, PMI and the private sector. In addition to the E8 and MOSASWA elimination grants, the Global Fund supports all E8 countries (except South Africa) through country specific grants, which principally fund the National Malaria Control Strategies (NSPs) gaps. Through its catalytic envelope, the Global Fund is exploring ways to invest strategically by supporting the E8 agenda and leverage additional resources.
The BMGF supports the E8 region through various partners to map human migration and parasite flows; strengthen fit-for-purpose elimination surveillance systems; maintain technical support units to support national strategy planning and funding requests; support enhanced vector control capacity and entomologic intelligence; and conduct operational research on new strategies. The BMGF is actively discussing their next phase of engagement in Southern Africa and exploring ways to co-fund and/or align these resources with the Global Fund's catalytic funding for the region.
The PMI currently funds activities in four countries of the E8: Angola, Mozambique, Zambia and Zimbabwe. PMI focuses on malaria control programmes, but also provides considerable technical assistance through their Malaria Annual Plans, which focus on supporting IRS, Long-lasting Insecticidal Nets (LLINs) free routing distribution, case management as well as commodity supply chain management.
There is also a unique private sector platform called "Goodbye Malaria" that – in addition to being the co-funder of the MOSASWA grant – mobilizes private sector funding for malaria elimination in the region. The Isdell Flowers Foundation is also involved in malaria and provides funding to the E8 secretariat.

The main **networks** involved with malaria active in the region include the African Leaders Malaria Alliance (ALMA), the Southern Africa Regional Network (SARN) of Roll Back Malaria, and Malaria Control and Elimination Partnership in Africa (MACEPA).
ALMA is a coalition of 49 African Heads of Government, which recently adopted a malaria elimination agenda and the "ALMA 2030 scorecard towards malaria elimination" to monitor progress (see Annex 4: Malaria Score Card). The coalition is currently chaired by the King of Swaziland, and ALMA also has a seat at the E8 Secretariat Board.
SARN/RBM has a mandate to mobilise political awareness and strengthen partnership and has also been providing key technical assistance for the E8 to design their approach. In line with its renewed vision outlined in the Action and Investment to Defeat Malaria 2016–2030 (AIM), the RBM plays a pivotal role to combine forces to defeat malaria especially by bringing on board non-health sectors in the elimination agenda.

MACEPA operates mainly in Zambia and has developed a network of community health workers involved in testing & treating malaria. It also pilots mass drug administration interventions in certain settings.

The main partners providing **technical assistance** include the WHO, the Clinton Health Access Initiative (CHAI), UNICEF and others (i.e. ALMA and SARN, as mentioned above).
The WHO provides policy and technical guidance and technical assistance to countries, through its Global Malaria Programme (GMP), the Inter-Country Support Team (IST) as well as their respective country offices.
CHAI focuses on technical assistance to NMCPs as well as looking at new ways to track the parasites in the context of cross-border mobile connected communities. Indeed, both WHO and CHAI play a pivotal role in supporting the regions preparedness, monitoring and response plans
UNICEF and IOM are also active in addressing access for children and providing migration information.

There are also numerous regional and global **academic research institutes** involved in the region. The main ones include the Global Health Group based at the University of California San Francisco (GHG-UCSF), which has been the first to support the concept of the "E8" a decade ago. Since then, it has provided key strategic support to elevate the elimination agenda at the highest political level. It also has been supporting financially the E8 Secretariat, including the E8 Ambassador. The University of Namibia (UNAM), the INS, The National Institute for Communicable Diseases (NICD), *Centro de Investigação em Saúde de Manhiça* (CISM), The South African Medical Research Council (SA-MRC) have also been involved since the early stages of the E8.

In terms of the partner landscape, some observations can be made. Firstly, there seems to be limited regional coordination of support to the E8, in terms of a coordinated technical assistance platform, or a coordinated research agenda. This seems to leave some crucial areas unsupported, for instance capacity building of the human resources within NMCPs and at lower/district level[20], the lack of sufficient entomological and epidemiological data to respond to the changes in vector species/biting behavior, resistance to current tools and increased importation. In addition, one issue that came across was around how much the new interventions or innovative approaches conducted by some partners are validated (or not) and embedded in the E8 strategic approach. While there is a certain degree of operational and/or implementation research that needs to be conducted in a 'learning by doing' approach, it is not clear if there is a mechanism to assess and evaluate their impact for the malaria elimination purposes. It would be important for the E8 Board to play a stronger role in overseeing such interventions and determine by scientific evidence if they are effective or not. Recognizing that there is some frustration with the slow pace at which new knowledge is generated, the E8 would benefit to have a better control on interventions that have no impact on malaria elimination in the front-line countries. The technical partners should support the E8 Board to develop a comprehensive regional elimination plan that clearly differentiates proven interventions from those that are being investigated as research activities, as well as those best implemented by country programmes vs. a regional platform.
Secondly, the role of NGOs and civil society organisations seems to be limited to service delivery and not so much to advocacy or decision-making. A joined civil society platform as part of the E8 structure could look at community, gender and rights issues that could impede

[20] An E8-CHAI mapping exercise was conducted in 2015 to assess main gaps in surveillance capacity.

access to services (although most of our interlocutors were not very vocal in this regard). Another area that this platform could look at is the role the community health-based services play as part of the health system strengthening response in malaria elimination. This latter could be extended at a further stage to the health security agenda.

Thirdly, while private sector engagement as part of the MOSASWA initiative translated in concrete action, little seems to have happened in the rest of the E8 to bring on board large corporations. While raising awareness has been made through regional communication, there needs to be a real strategy in place to embrace non-health sector in the malaria elimination agenda. The RBM and/or "GoodBye Malaria" could be well-placed to promote the engagement of the private corporate sector employing large numbers likely to be infected in the elimination agenda. However, it should be flagged that in addition to a strategy, engaging with non-health corporations requires a set of skills, which the E8 should consider. To obtain concrete results the right partner(s) with the right culture should be identified. This could leverage resources of private and state-owned enterprises. In addition, the E8 could launch a private sector accreditation scheme to secure commitment of corporate sector's participation in malaria treatment and prevention activities to speed-up elimination.

Finally, there is a general consensus that WHO support has been sub-optimal in the region for malaria elimination. The WHO Regional Office for Africa (AFRO) has a recently appointed malaria elimination focal point and a malaria team lead for southern Africa based in the Intercountry Support Team (IST). The three front-line countries (Swaziland, Botswana and South Africa) have malaria National Program Officer (NPO) focal points that have other key job responsibilities and do not focus on malaria elimination. Namibia has a vacancy in malaria NPO, while the four second-line countries all have dedicated malaria NPOs. While CHAI has, to some extent, been filling the gap in providing technical support to NMCP for their elimination interventions, they do not have the mandate or the convening power to replace WHO. As we are entering in elimination phases in front-line countries, there is a need for stronger active engagement and guidance from the WHO in the region. The focus could be placed in strengthening the regional data-sharing platform, providing pro-active, normative guidance on elimination, as well as engaging in the E8 Board (maybe a seat open at the E8 Board from GMP), and also linking up the WHO Elimination oversight committee to the monitoring mechanism proposed to support the E8 Board.

4.3 Financial Landscape for Malaria Elimination in the SADC and E8 Region

A tighter fiscal space

Some malaria endemic SADC countries have recently taken greater responsibility for investing in reducing malaria transmission. Domestic financing accounted for approximately US$ 89 million in 2014 and increased to US$ 118 million in 2015 and US$ 116 million in 2016. This included a US$ 20 million increase in Angola in 2015 in response to an outbreak of yellow fever and malaria. For the E8 countries alone, domestic funding was US$ 71 million, US$ 100 million and US$ 98 million over the same period[21].

There are however, some variations, both in terms of trend (Mozambique spent 76% less in 2016 than in 2015, while Zambia, Swaziland and Namibia spent almost 30% more), as well as in terms of domestic vs. external contribution to the malaria budget of the country (see table below, Zimbabwe vs. South Africa).

[21] Malaria report 2017 - SADC

Table 3: Summary Allocation of Funding (US$ million) for Malaria – E8 Countries

	Domestic *2016*	Global Fund *2018-2020*	Other *2015*	Nat'l budget *2016*	Funding gap
Angola	45.0 m	26.9 m	PMI: 28 m	110.3 m	21.4 m
Botswana	1.3 m	1.3 m	-	7.7 m	3.8 m
Mozambique	1.2 m	167.9 m	PMI: 29 m World Bank: 1 m	90.0 m	-
Namibia	5.2 m	2.4 m*	-	10.3 m	-
South Africa	14.4 m	-	-	19.6 m	a. m
Swaziland	1.1 m	2.6 m	-	3.3 m	0.5 m
Zambia	28.5 m	69.0 m	PMI: 24 m UK DFID: 12 m	103.4 m	50.7 m
Zimbabwe	0.5 m	53.7 m	PMI: 15 m	67.1 m	32.7 m

Source: SADC malaria report 2017
**updated figure from Global Fund Secretariat*

The current malaria Global Fund country portfolio of all seven eligible countries (excl. South Africa) of the E8 accounts for US$ 314,3 million for the ending period (2018) and US$ 323.7 million for 2018-2020. Of this new allocation, only 3.7% is channelled to the three front-line countries, while the remainder goes to the second-line countries. In addition, the current regional Global Fund investment in the E8 and MOSASWA is US$ 27.6 million[22].

Donor funding will reduce as E8 countries move from low- to middle-income status, which implies an increasing reliance on domestic financing for malaria activities. The countries that are closest to eliminating malaria saw some important reductions in funding from the Global Fund. For example, Botswana received 75% less funding than in the previous round; Namibia's allocation decreased by 67%, and Swaziland's by half. Furthermore, Botswana will not receive any further money from the Global Fund after 2020, and Namibia and Swaziland have been notified that they are in the cohort of the next transitioning countries as per the Global Fund criteria.

In a context of interconnectivity of communities in the E8 region, it is important to re-emphasize the fact that lack of funding in one country can lead to a resurgence of cases in another. In addition, second-line countries could be tempted to focus available resources on higher burden areas, deprioritizing border areas which are of key importance from the regional malaria elimination perspective.

Financing through innovative mechanisms

Globally, countries are increasingly considering new financing options that leverage debt with financial assistance in order to move from a donor-dependent grant to one that is financed from domestic funds. Social Impact Bonds (SIB) and/or Development Impact Bonds (DIB) and/or soft loans[23] through blended funding are the most common options discussed to possibly bridge the gap between dependence on donors and reliance on domestic resources. In Mozambique, the issuance of a DIB for malaria elimination is being trialled through the RBM

[22] Including US$ 4 m from the private sector 'Good Bye Malaria', channelled through the Global Fund

[23] High and Middle-Income Countries are eligible for low interest loans if they are part of a regional initiative

Partnership and Dalberg.[24] These types of bonds present an opportunity to leverage financing from non-traditional investors.

Another interesting funding arrangement was made in seven Central American countries and the Dominican Republic through the Regional Malaria Elimination Initiative (RMEI). The mechanism will bring $83.6 million in new funds, and is expected to leverage over $100 million in domestic financing and $39 million of existing donor resources across the region by 2022 to ensure malaria remains a top health and development priority despite dwindling numbers of cases[25].

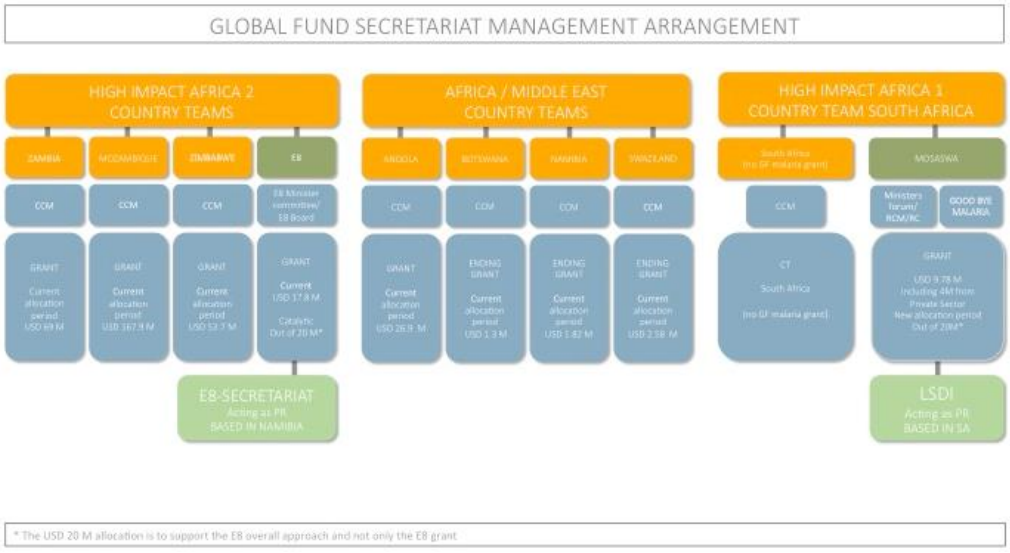
V. Global Fund Secretariat Management and Funding Arrangements for Malaria in the E8 Countries

5.1 Current malaria portfolio and options for change

After discussing with country team, the mission looked at how the Global Fund secretariat malaria portfolio in the whole E8 region is structured.

Currently, the Global Fund portfolio consists of seven country grants and two regional grants (E8 and MOSASWA). The country grants are managed by seven different country teams being part of three regional departments. The E8 and MOSASWA grants are also managed by two different country teams each being part of two different departments: respectively High Impact Africa 2 and High Impact Africa 1. The E8 grant is managed by the Zimbabwe country team and the MOSASWA grant by the South Africa country team. The three front-line countries having national grants from the Global Fund work under the leadership of the Africa-Middle East department.

At country level, each national grant and respective principal recipient works under the oversight of their country-specific CCMs. The E8 operates under the E8 secretariat board and the E8 Minister sub-committee, and the MOSASWA under the RCM, the Regional Council (RC) and the MOSASWA Ministers forum. Both grant recipients and oversight also liaise with their respective country CCMs.



[24] While the first malaria bond has not yet been issued, a goal of US$ 3.5 million has been set, and apparently a pledge of US$ 1.5 million from Nando's has been secured

[25] https://www.iadb.org/en/news/initiativeannouncedtoendmalaria

Options for change

While country teams in charge of the different grants do regular coordination and exchange, the current setting is not optimal as it tends to result in silos. The current setting may not reflect anymore the region change of paradigm of shifting from country grant approach to regional approach for elimination purposes. In addition, there is an opportunity to adjust the grant management organisation to align better to the concept of "catalytic" support.

On the management side, one option could be for the new "catalytic" fund to be under the leadership of one department and a dedicated country team that would also be in charge of managing the national grants of the three front-line countries. This would send a clear and coherent message that the Global Fund support for issues is really entering a new era.

On the funding structure side, it would also make sense to have the country allocation of the three front-line countries (which interventions should be focused on elimination) merge with the catalytic envelope and become a single regional fund for elimination. Allocation per country would then be done looking at elimination priorities and would include allocating resources to both front-line and second-line countries based on a well-informed and costed revised elimination plan. The latter may not be realistic for the current funding period, as some countries are already engaged in grant process negotiation, signing or implementation (Botswana, Namibia, Swaziland). However, this could be envisioned for the following allocation period. Transitioning countries could see a clear incentive, as being part of a regional initiative will enable them to use funding from the Global Fund; this is currently the case for South Africa and will be for Botswana after 2020. This would not automatically mean that the money will be managed by a regional entity; rather, the allocation per country will be decided from a regional perspective by the E8 Board based on evidence-based information serving the purpose of malaria elimination of the E8 as a region.

5.2 Consideration for the E8 to Access and Apply for Funding

As per the guidance note from the Global Fund, "Multi-country Approach in the Global Fund's 2017- 2019 Funding Cycle", the elimination of malaria in Southern Africa was identified as part of the three priority regions with the aim to support the Global Technical Strategy goal of eliminating malaria in low burden countries. The overall Board-approved catalytic investment areas for Malaria Elimination for the period 2017-2019 is US$ 202 million, of which the designated ceiling amount for Priority region 2 in Southern Africa is US$ 20 million.[26]

From all E8 countries, only Botswana is transitioning through its current grant, the first and last it will receive from the Global Fund. Namibia and Swaziland are not transitioning but fall under the cohort of Low-Middle-Income and Low-Disease-Burden countries that should be encouraged to start speeding up the process. This doesn't mean that they will not be eligible for another grant after the current one. South Africa is currently not eligible for country grants from the Global Fund. However, under the Sustainability Transition and Co-financing (STC) policy, multi-country grants can include funding for non-eligible countries as long as more than 51% of the countries being part of the proposal are eligible. Considering the above, all countries of the E8 are theoretically eligible for funding under the US$ 20 million catalytic envelope. Finally, while Global Fund resources are usually more prone to be used for service delivery, in the context of a regional initiative, the Global Fund should be open to make

[26] "Multicountry Approach in the Global Fund's 2017- 2019 Funding Cycle", November 2017

significant sub-allocation to support the E8 for advocacy to engage with non-health actors as well as building a strategy for resource mobilization.

The Global Fund made a distinction between multi-country grants (typically groups of Small Island economies funded through country allocations) and regional grants (which brought together a number of countries and were funded through a separate pool of funds). For the 2017-2019 cycle, a 'multi-country grant' is now used to refer to both types of grants.

Three main modalities can be applied, namely: 1) program continuation, 2) pre-shaped or pre-identified request, and 3) request for proposal (RFP). For the E8 allocation, the Global Fund access to funding team has retained options 2 and 3.

For option 2, the principle is that once an applicant is pre-identified, the Global Fund Secretariat invites them to develop a comprehensive funding proposal that specifically addresses the approved priority area and regional focus. With this scenario, the secretariat could inform the applicant in April and the TRP could review the request during the next 2018 window.

Pros: Ensures continuity and offers flexibility in terms of designing the new request based on better data and coming grant evaluation outcomes;
Reinforces current political and coordination momentum;
Strengthens the lead to already knowledgeable teams in place;
The E8 secretariat could be used as PR and transition to another fund facility when/if a blended financing mechanism is established.

Cons: May limit the possibility to open to not-yet-identified new actors, including private sector.

For option 3, the principle is that the Global Fund would launch a Request for Proposal (RFP) published on their website based on priority areas with specific Terms of Reference (TOR) that the applicant will need to address in their funding proposal. This competitive application process is published 4 to 6 months prior to the expected submission window in order to allow for robust regional dialogue.

Pros: Allows reconsideration of the current structure; a complete review of targets; and a redefinition of technical and managerial approaches.

Cons: Will likely disrupt the good momentum by sending a mixed message to the E8.
Causes significant delays in light of E8 grant end (Oct 2018), making the timing not feasible.

Given the above, the mission recommends using Option 2.

VI. Review Discussion

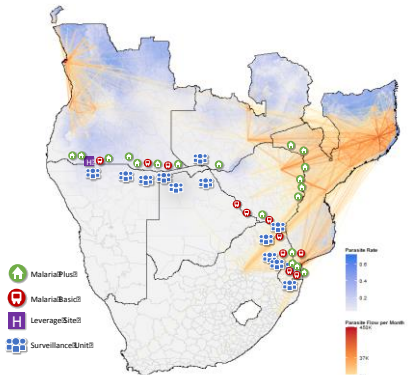
During the review, some issues emerged, which can be summarized as: 1) the quality of data analysis to properly inform decision makers on the most appropriate packages of interventions to be supported for the purpose of malaria elimination, 2) how the regional response is being governed, including integrated coordination mechanism in place, and how the chain of leadership from the highest political level down to the implementation level can be reinforced, and 3) regional collaboration and a coordinated emergency response in case of outbreaks including data sharing and monitoring capacity.
Each of these is discussed in turn below.

1) Data for decision-making

One issue that was raised for both the E8 and MOSASWA grant approach relates to the accuracy of the information that was and is used to decide on the packages of interventions to be implemented as well as the site selected to deliver services.

When looking at mobility, there are different reasons why people are crossing borders, such as seeking treatment on the other side of the border (Angola to Namibia), visiting family, crossing borders for economic or trade purposes, or for tourism (South Africa and Swaziland to Mozambique beaches, Victoria Falls area Zim/Zam boarder, and back). In Angola and Mozambique, the highest malaria case-load is not in the border areas, whereas the two regional strategies to eliminate malaria are focused on reducing cross-border transmission. Several "malaria communities" exist within the boundaries of the E8. Some are exporters of malaria and some are net importers of malaria. Despite their importance, some source communities have inadequate intervention coverage and are not prioritized in the NSPs. There are currently not enough robust entomologic and epidemiologic data for each unique setting, and sources of infections are identified through case facility information and general reports on routes of migration. Where data is collected, through routine Health Management Information System (HMIS) and ad-hoc data (surveys) collection, these may not always be sufficient to properly adjust interventions. Also, collected data are often not or poorly analysed, whereby the analysis has a national rather than a regional focus (i.e. no particular attention to border areas).

There are several sources of human mobility data that could be better analyzed in conjunction with malaria incidence and prevalence information to better understand malaria parasite flows, including: air and sea travel data records, census migration data, travel history and displacement surveys, Global Positioning System (GPS) tracking data and volunteered geographic information, satellite night-time light data, mobile phone call detail records (CDRs), patient travel history data, containing detailed demographic information and travel motivations[27]. By doing so, some consistent patterns will emerge around the concept of "connected communities". Some initial analysis has been completed and refined using other sources of data to define "connected communities" at the right resolution for decision making. Overlaying "connected communities" with intervention data would help identify places of low coverage, which would require further effort. As an example the illustrative map below overlays different set of data including parasite rate, monthly parasite flow, main migration movements based on tracking mobile phone movement, and the location of the border health posts and surveillance units under E8 grant.



Sources: Connected communities for malaria elimination: A summary of analyses and evidence (CHAI 2017), E8 data

[27] Connected communities for malaria elimination: A summary of analyses and evidence (CHAI 2017)

In addition, the recent data generated in the region shows that as transmission declines, regional epidemiology becomes increasingly heterogeneous. As a consequence, a shift towards differentiated elimination programming based on real-time data is urgently needed. For example, in many frontline countries changes in vector species/biting behavior, resistance to current tools, increased importation, and seasonal outbreaks are stopping progress and the current generalized global policy recommendations are arguably insufficient to provide the detailed-technical guidance required to respond to the unique set of challenges facing the region.

In the absence of explicit recommendations for each unique elimination context (i.e. "one size fits all" elimination package), countries need much more flexibility to experiment with new strategies, rapidly generate and review data, and adopt a "learn by doing" approach to implementation. As such, robust surveillance, monitoring, evaluation, and experimentation should be included as a core element of the regional elimination approach"[28].

By improving its data analysis methods, the E8 initiatives would have a much stronger capacity to develop a solid E8 strategy for the whole region and accordingly tailor sub-regional packages of interventions serving solely the elimination purpose. Consequently, the E8 will be able to develop a strong investment case and likely be attracting more funding partners by demonstrating that its set of interventions can have long-term impact.

2) Governance of the regional response

The review team was not able to assess in detail how effectively the different governance platforms and relevant committees are functioning. In general, we observed by participating in various forums that processes are in place, the organization was smooth, and there is good participation from stakeholders bringing in valuable knowledge and expertise on the different topics.

Based on the interviews with the various stakeholders, we captured some generic issues.

- ***Need to clarify complementarity and additionally of the regional approach versus country approach***

Given individual countries are often motivated by self-interest to advance efforts within their individual borders, it will be important for the E8 and for its financial and technical partners to define the unique aspects of a regional approach and provide clear guidance on how regional funding differs from the more traditional, country-specific allocations. The table below provides the overarching complementarity regional vs country approach delineation.

Table 4: Role of Regional vs. Country Approach

Regional Approach	Country Approach
• Prioritizes and targets interventions based on regional sources of infection that are not sufficiently addressed in country-allocations alone, yet are critical for achieving elimination • Decision-making and governance via regional coordination mechanism	• Prioritizes and targets interventions based on national incidence (e.g. high-burden areas in second line countries) • Decision-making by National Malaria Control Programme and partners • Allocates resources based on national priorities and needs

[28] BMGF report

inclusive of a broad set of stakeholders (e.g. Ministries of Health, WHO, private sector, Civil Society, NGOs, Academia, etc.) • Allocates resources based on robust regional analysis of areas with high-incidence and high-mobility, driving regional transmission onward • Synchronizes interventions (this can be done at sub-regional level)	• Integrated coordination with district health authorities

➢ ***Better governance rather than more governance***

Another observation made is that there seems to be a tendency to "add extra layers of governance" along the way as a response to issues arising, making the governance architecture relatively complex and bureaucratic. The current E8 governance manual is a very detailed 52 pages document that was developed in 2017. As one interviewee said: "*What is needed is to bridge the gap between political and technical issues with more flexibility and less formal meetings*". While there is an extensive list of governance agreements, guides and manuals, there seems to still be a gap between what is relevant to politics and what is relevant to technical issues. The E8 Minister's sub-committee (sub-committee of the SADC) would benefit from the support of a stronger-empowered E8 Board as the main strategic platform whose aim is to steer the malaria elimination agenda. For example, the release of a joint circular on the fact that all migrants, including illegal migrants, should have access to free malaria services across the whole region should come from the SADC. A more questionable decision is when the SADC declares that E8 elimination should be done using a specific insecticide (DDT), which is not supported by technical evidence.

It should be noted that the Global Fund, though providing important support to the E8 in its goal to eliminate malaria, does not have the same leverage in the region as for instance in the Mekong, where it represents the core budget of all programs. Therefore investments must be strategically used to leverage resources and expertise. In addition, one of the catalytic funding fundamentals is to leverage additional funding and support a regional strategic direction in a context of donor funding reduction.

In this light, and as we move towards regional approaches for malaria elimination, the Global Fund should consider strengthening the E8 Board to steer and champion the elimination agenda in the whole E8 region. The profile of the E8 Board would then be elevated. The membership would also have to be revisited to better represent the ambition. First it should ensure stronger country ownership by having each of the E8 Ministries of Health represented. Membership should be based on members willing to represent their "constituencies" with clear terms of reference, and possibly deliverables, as needed (donors, WHO, multi-lateral organisations, private sector, civil society, academics), to ensure a proper sense of ownership.

Currently there seems to be a fairly conservative interpretation of the conflict of interest (COI) in the E8 secretariat board, as NMCP managers cannot vote. While the principle of COI is to be maintained, it should be put into perspective and also looked at from the perspective of "convergence of interest". In this case, risk of COI versus the benefit of having a strong country representation in an expanded E8 board is certainly minor. One way to overcome this is to have Ministries of Health Communicable Disease Department Directors being members

together with the NMCP Directors as observers, so the countries are fully represented, creating more buy-in and ownership.

- ***Delineate E8 Board role as the regional strategic unit with the regional technical forums supervising sub-regional packages of interventions***

With an E8 Board playing its role as the strategic unit to invest resources in impact interventions across the whole region, sub-regional hands-on technical guidance through technical forums is still needed to coordinate interventions. Following the current model of MOSASWA with its Regional Council, such forums should be closely tied to the units implementing the selected set of intervention decided by the E8 Board. They should have the right level of authority to ensure that commodities are in place, implementation is on track and that synchronicity on interventions is happening as required.

One final observation on technical coordination relates to lack of involvement of local health authorities in the process of programme concept development, programme planning, programming, implementation and oversight of the two regional grants. District Health Management Teams (DHMTs) in the E8 countries are responsible for all health-related activities in their respective districts. These teams cover basic actions such as annual district health planning and programming, coordination of activities by government and partners, human resources, drug management, monitoring and supervision. In both of the two regional grants, the DHMTs rarely seem at have been fully involved in programme activities. This lack of involvement can hamper proper coordination and integration of activities at the district, and undermine ownership at the lower levels.

- ***Delineate E8 secretariat role in support to the Board and its committees, with the current E8 secretariat role as fund manager***

The E8 secretariat is currently accumulating various roles including various secretariat roles (as described earlier in the report) but is also managing grants. In addition, the E8 secretariat legal status is an NGO registered in Namibia as requested by the SADC so to be able to sign agreements. The situation is not ideal as those are two very distinct functions require different lines of accountability. As the E8 initiative may move forward in establishing a financing platform to manage and distribute the finance, it would be necessary to revise this setting. In order not to disrupt the current organisation, this could be done after consultation with the E8 Board and partners to assess better options.

3) Regional collaboration and coordination of the emergency response

The Global Technical Strategy 2016-30 recommends as one of its three pillars the transformation of surveillance into a core intervention to achieve elimination. As part of the E8 strategy, robust systems for case reporting, investigation and response have been prioritized to accelerate progress towards elimination. It should be noted that in the expression of interest, which the member states developed earlier in 2014 and which made way for the Global Fund proposal, the concept was mainly focused on regional surveillance[29]. Preliminary work was conducted by the E8 secretariat in 2015 (with the support of CHAI) to inform the design of a regional surveillance system, with a good understanding of the commonalities and differences across the systems, but also to assess country capacities and identify gaps. A company was subsequently hired by the E8 secretariat to design database

[29] Minutes of E8 Minister's meeting: Harare, July 2015

software with the option of entering detailed disaggregated data. However, given the highly sensitive nature of data sharing among countries, there was a certain perception of non-neutrality. While the data were meant to be owned by the countries, working with a non-state affiliated entity (perceived as non-neutral) prevailed and resistance to sharing data occurred. This is a good lesson to learn from. It is important that the E8 as a regional initiative uses the adequate institution with the right mandate. In this particular case, given the crucial role surveillance plays in elimination and the highly sensitive nature of data sharing, WHO could be playing a pivotal role in the future.

The recent Swaziland outbreaks seem to have been the "wake up call" and a "turning point" of data sharing across the region. With the subsequent creation of the Emergency and Preparedness Response (EPR) Situation Room, reporting and sharing data has improved significantly. However, more can and should be done to support the E8 initiatives and each of the NMCPs within the countries to create a stronger culture of data sharing. The use of shared information is ultimately what should drive the regional prioritization and evidence-based decision making.

Regular data sharing through the Situation Room should happen as much as possible in real time. Currently the countries are having weekly calls and publish monthly bulletins. In addition, there is an opportunity to elevate the data sharing culture to enhance monitoring and evaluation through the creation of an on-line regional data-sharing platform with the aim to better understand disease trends and strengthen surveillance. The underlying idea is to start shifting the focus from a "control-mode" into an "elimination-mode". This can further support the need to strengthening the overall capacity of national programs to generate, analyze, store, share, and use information to target interventions and support better cross-border collaboration.

While exchanging information is needed, it is equally important to make use of this information in real time, shifting from a reactive to a pro-active mode. This requires a mechanism that can alert decision makers, challenge the status quo by providing answers, and confront difficult issues in an independent fashion. The current technical committees, while providing great advice, are bound to their respective lines of command. The E8 would benefit from having an independent monitoring group to play this role.

Finally, the surveillance effort for malaria elimination could also be an entry point to look at it from a broader health security perspective. Considerable support is being given to global health security and the degree to which rapid response teams are operational should be assessed, along with discussion on how to integrate malaria outbreak response into their response activities. This integration will be critical for prevention of re-establishment once countries reach elimination, so it should be addressed now, and the E8 could play an important role in facilitating these discussions.

VII. Conclusion

There is a clear and strong momentum of political engagement from the SADC to move towards malaria elimination in the region. The SADC and its Minister's sub-committee offer a unique convening power, which constitutes the foundation of the E8. There is also a general consensus on the fact that both Global Fund regional funded initiatives, together with the investment of other partners - mainly the Bill and Melinda Gates Foundation - have been instrumental in supporting the SADC's vision so far. While it is too early to assess the impact of these interventions, we can say that the E8 has improved service coverage in key border

areas and MOSASWA is currently reducing transmission through its vector control interventions: “the foot is in the door”.

However, as some E8 countries are moving from low- to middle-income status, it implies an increasing need for more reliance on domestic and/or innovative financing. This change of paradigm is an opportunity to move to the next level. To do so, the SADC would benefit from strengthening the E8 leadership by elevating the E8 Board mandate to better reflect its regional elimination ambition. This can be done by reinforcing its country ownership and fine-tuning partner’s representation. Under a stronger E8 Board overseeing all elimination initiatives in the region, the focus should simultaneously go towards developing: a solid inter-country data analysis to identify sources of infection and strengthen regional surveillance capacity; implementing a set of tailored sub-regional packages of interventions based on the principle of “connected and underserved communities”; developing a long-term financing strategy and establishing a fund facility for the whole E8 region; and finally, strengthening its monitoring and alert mechanism capacity through reinforcing regional data sharing and emergency response.